



MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date: September 21, 2022

Department: Public Works Agenda Planning Date: Sept 8, 2022 Time required: 5 min

Audio/Visual aids

Contact: Brian May Phone: 503-365-3147

Department Head Signature:

TITLE Consider approval of a Sole Source procurement for use of incinerator ash for alternate daily cover (ADC) at the Coffin Butte Landfill (managed by Valley Landfills, Inc).

Issue, Description & Background Each year, the Energy-from-Waste facility in Brooks incinerates about 185,000 tons of solid waste and produces around 50,000 tons of ash, which is stored in monofills at our North Marion site near Woodburn. On May 11, 2012, ODEQ approved the incinerator ash for long-term use as alternate daily cover at the (previously Coffin Butte) Landfill. The ODEQ approval is exclusive to the CB Landfill and cannot be used by other landfills without performing a demonstration. Since CB is the only landfill approved by ODEQ to receive the ash as ADC, Public Works is requesting a sole source procurement under public contracting rules section 20-0275. Sole source procurements authorize the award of public contracts without competitive bids, pursuant to ORS 279B.075.

Financial Impacts: The estimated cost for 65,000 tons of ash used for ADC, beginning at \$22.68 per ton, would be \$1,474,200 per year.

Impacts to Department & External Agencies The use of the ash as supplemental landfill cover reduces the need for soil cover, generates less dust than soil during dry periods, and spreads more efficiently during wet periods.

Options for Consideration: 1. Approve Sole Source Justification for contracting with Valley Landfills for ash daily cover at the Coffin Butte Landfill. 2. Consider other options for re-purposing incinerator ash.

Recommendation: Public Works recommends the BOC approve the Sole Source Justification for contracting with Valley Landfills for ash daily cover at the Coffin Butte Landfill.

List of attachments: Sole Source Request, Ex. A: 2012 Public Notice Memo plus 2022 SS Confirmation Email, Ex. B: 2012 DEQ Letter of Approval, Ex. C: 2010 Ash Analysis Results

Presenter: Brian May

Copies of completed paperwork sent to the following: (Include names and e-mail addresses.)

Copies to: Chalyce MacDonald - cmacdonald@co.marion.or.us

BEFORE THE BOARD OF COMMISSIONERS
FOR MARION COUNTY, OREGON

In the matter of granting an exemption to)
award a sole source contract pursuant to the)
Marion County Public Contracting Rules)

ORDER NO. _____

This matter came before the Marion County Board of Commissioners, acting as the Marion County Contract Review Board (Board), on at its regularly scheduled public meeting on Wednesday, September 21, 2022.

WHEREAS, the Board finds that Marion County Public Works Department seeks an exemption from Marion County Public Contracting Rules, pursuant to Section 20-275, which allows a contract to be awarded without competition as a sole source procurement as directed by the Board of Commissioners under ORS 279B.275; and

WHEREAS, Section 20-275 allows the Board to award a contract as a sole source contract exception to the prescribed public contracting practices in Oregon and its use must be justified in accordance with public contracting code and Marion County Public Contracting Rules; and

WHEREAS, the original contract with Valley Landfills, Inc. for the acceptance of incinerator ash for use as alternative daily cover was entered into on July 31, 2012, as set forth in the attached Exhibit A Findings; and

WHEREAS, the Valley Landfill, Inc. Coffin Butte Landfill is the only Oregon Department of Environmental Quality approved landfill to receive ash as Alternative Daily Cover; and

WHEREAS, the Findings, attached as Exhibit A, must document the written justifications for the award of a sole source contract pursuant to Marion County Public Contracting Rules Section 20-0275 and ORS 279B.075; and

WHEREAS, the Board has received justification and testimony during the properly noticed period before consideration of a sole source procurement request on September 21, 2022, and finds the award of a sole source contract for incinerator ash for use as alternative daily cover is justified and consistent with the Marion County Public Contracting Rules; now, therefore,

IT IS HEREBY ORDERED that the Board adopts the findings attached hereto as Exhibit A and grants an exemption to award an initial ten-year contract with Valley Landfill, Inc. to accept incinerator ash for use as alternative daily cover.

DATED this 21st day of September 2022.

MARION COUNTY BOARD OF COMMISSIONERS

Original: Clerk
cc: BOC
Public Works Department
Finance – Contracts

Chair

Commissioner

Commissioner

Attachments:
Exhibit A – Department Findings

SOLE-SOURCE DETERMINATION AND JUSTIFICATION
No. PW1150-22

Date of Request: August 30, 2022 **Department Name:** Public Works

Department Contact Name: Chalyce MacDonald

Time Period Requested: From: September 1, 2022 **To:** August 31, 2032

Total Estimated Cost: \$14,742,000.00

Title: Supplies and/or Services to be acquired:

Evaluation of Incinerator Ash for Landfill Alternate Daily Cover Material (ADCM).

1. Background:

This sole source justification applies to the use of incinerator ash for alternate daily cover at the Coffin Butte Landfill. The Contractor shall accept municipal solid waste (MSW) incinerator ash and shall handle the ash in accordance with Oregon Department of Environmental Quality (DEQ), which approves of the long-term use of the ash as a supplemental material for daily cover if the ash is from the North Marion County Disposal Facility and applied approximately 6" deep.

The MSW ash is classified as a non-hazardous residue, resulting from the incinerator of municipal solid waste at the Marion County – Covanta Waste to Energy Facility. The ash has granular characteristics similar to rock and soil aggregate. The ash shall be screened to a maximum size of 1 1/8"-0".

2. Findings:

The DEQ completed a review of Valley Landfill's performance over a 12-month trial period in 2012, concluding:

1. the use of the incinerator ash as ADCM results in a daily cover material that has no discernible difference from a soil-only daily cover when spread six inches deep over the active waste area;
2. the use of the ash as a supplemental material for daily cover reduces the site's need for soil, which will help with the long-term site soil balance;
3. the material works well and generates less dust than soil during dry periods, and spreads more uniformly, compared to soil, during wet periods.

A. Market Research Overall Finding.

In June 2022, Brian Fuller, the Manager for Hazardous Waste and Materials Management Programs for Oregon DEQ, confirmed that the Coffin Butte landfill is still the only landfill approved to utilize ash from the Covanta incinerator as ADCM. Any other landfills requesting to utilize incinerator ash would be required to complete a similar 12-month trial and submit performance reports to the DEQ.

And

B. Determination pursuant to MCPCR 20-0275(2) must include, at a minimum, one of the following:

1. Pursuant to MCPCR 20-0275(2)(a): Compatibility. Provide findings supporting your determination that the efficient utilization of existing goods requires the acquisition of compatible goods or services from only one source.

Attached document Exhibit A, the original memo of public notice and letter of approval, provides more information on requirements to be considered for acceptance of ash for ADCM. June 2022 confirmation of Coffin Butte as the sole source of this approval is included in Exhibit A.

Sole Source Authorized: Yes No

BOARD OF COMMISSIONERS:

Chair Date

Commissioner Date

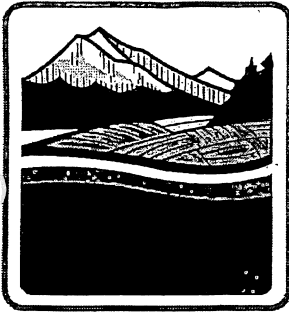
Commissioner Date

Authorized Signature: _____
Department Director or designee Date

Authorized Signature: _____
Chief Administrative Officer Date

Reviewed by Signature: _____
Marion County Legal Counsel Date

Reviewed by Signature: _____
Marion County Contracts & Procurement Date



Marion County

OREGON

FINANCE DEPARTMENT

BOARD OF COMMISSIONERS
Sam Brentano
Janet Carlson
Patti Milne


CHIEF ADMINISTRATIVE OFFICER
John Lattimer

CHIEF FINANCIAL OFFICER
Jeff White

Telephone:
(503) 589-3295

Fax:
(503) 373-4379

MEMORANDUM

Date: August 1, 2012
To: Procurement File
Cc: Don Alexander, Timothy Beaver, Jeff Bickford
From: Peggy Mitchell, Contracts & Procurement Manager 
RE: Sole Source Declaration for Alternative Daily Cover Material

A public notice was placed in the Statesman Journal on Saturday, July 14, 2012 the County's intent to purchase from a sole source provider, Valley Landfills. Valley Landfills will accept municipal solid waste incinerator ash as an alternative daily cover at the Coffin Butte Landfill at the rate of \$14.70 per ton.

The notice included a minimum seven (7) day protest period, which expired at 5:00 pm on Monday, July 23, 2012. No comments were received either for or against this purchase. The statutory requirement for publishing the sole source notice was met and the department may proceed with this purchase under Marion County Public Contract Rules Section 20-0275.

EXHIBIT A



Marion County
OREGON

PUBLIC WORKS

BOARD OF
COMMISSIONERS
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Janet Carlson
Patti Milne

DIRECTOR
Bill Worcester, P.E.

ADMINISTRATION

BUILDING
INSPECTION

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EMERGENCY
MANAGEMENT

ENGINEERING

ENVIRONMENTAL
SERVICES

OPERATIONS

PARKS

PLANNING

SURVEY

MEMORANDUM

Date: July 9, 2012
From: Don Alexander, Environmental Services
To: Peggy Mitchell, Finance Department
RE: Sole Source Procurement with Allied Waste Inc. - Coffin Butte Landfill

In December 2010 competitive bids were solicited by the Public Works Department for the transportation and acceptance of Municipal Solid Waste incinerator ash for evaluation as alternate daily cover (ADC). Three bids were received, of which Allied Waste Inc. (Coffin Butte Landfill) was the lowest bidder.

In January 2011 the Board of Commissioners approved an agreement with Allied Waste for the Transportation and Acceptance of Municipal Solid Waste Incinerator Ash for Evaluation as ADC. The agreement covered the transportation and acceptance of an initial 7,500 tons of screened ash which was generated during the metal recovery pilot project performed in the summer of 2010. A subsequent amendment was approved by the Board to provide an additional 30,000 tons of screened ash over the next 6 months in order to complete the ADC demonstration project as required by the Oregon Department of Environmental Quality. The demonstration project was performed over a one year test period which was completed in March 2012. A performance report was submitted to ODEQ on April 4, 2012.

In a letter dated May 11, 2012, ODEQ approved the incinerator ash for long-term use as alternate daily cover at the Coffin Butte Landfill. The ODEQ approval is exclusive to the Coffin Butte Landfill and cannot be used by other landfills with out performing a year long demonstration.

Coffin Butte is currently the only landfill approved by ODEQ to receive the ash as ADC. The department is requesting a Sole Source Procurement with Allied Waste Inc. under provisions of Marion County's Public Contracting Rules Section 20-0275 Sole Source Procurements. Allied Waste and the County have negotiated in good faith and have established a base price of \$14.70 per ton for the first year, with an increase of \$1.10 per ton per year for the following 3 years and a CPI adjustment beginning at year 5 of the agreement. The county is proposing to transport 65,000 tons of ash per year to the Coffin Butte Landfill for use as ADC.

EXHIBIT A

RE: DEQ Letter for Valley Landfill



FULLER Brian * DEQ <Brian.FULLER@deq.oregon.gov>

To Brian May

Cc Chalyce MacDonald; GAO Hugh * DEQ

Reply	Reply All	Forward		
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Mon 6/27/2022 10:39 AM

This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message.

⚠ WARNING: This email originated outside of Marion County.
DO NOT CLICK links or attachments unless you trust the sender and know the content is safe.

Hi Brian,
 The Coffin Butte landfill is currently the only landfill approved to utilize ash from the Covanta incinerator as Alternative Daily Cover. Please let me know if you have questions or need anything additional.
 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. [Learn more.](#)

From: Brian May <BMay@co.marion.or.us>
Sent: Monday, June 6, 2022 2:02 PM
To: FULLER Brian * DEQ <Brian.FULLER@deq.oregon.gov>
Cc: Chalyce MacDonald <CMacDonald@co.marion.or.us>
Subject: FW: DEQ Letter for Valley Landfill

Brian,
 I was wondering if you would be able to help. Our 10 year agreement with Coffin Butte Landfill to utilize the ash from Covanta is expiring at the end of June. Marion County contracting rules require proof / explanation if we wish to use a "sole source" agreement. It is my understanding that Coffin Butte Landfill is the only facility that is approved to utilize Covanta's ash as ADC. If this is correct, can you shoot me an email / letter that states this? I have attached the original approval letter for reference.
 Thanks,
 Brian May

EXHIBIT B



Oregon

John A. Kitzhaber, M.D., Governor

Department of Environmental Quality

Western Region Salem Office
750 Front Street NE, Suite 120
Salem, OR 97301-1039
(503) 378-8240
FAX (503) 373-7944
TTY (503) 378-3684

May 11, 2012

Brian May, Site Manager
Valley Landfill, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330

RE: Coffin Butte Landfill, SWDP No. 306
ADCM-Ash, NMCDF
Benton County, SW Projects 5873, 5968

Dear Mr. May:

The Department of Environmental Quality (DEQ) has completed its review of your performance report dated April 4, 2012. This report was titled "Performance Report for Use of Incinerator Ash as an Alternative Daily Cover Material (ADCM)." The material was used as a performance test at the Coffin Butte Landfill. Thiel Engineering prepared the report.

The report provides operational and monitoring results in the format described in your application and Work plan for the use of the incinerator ash as an ADCM for a 12-month trial period. The trial period started immediately after DEQ approved the application on March 4, 2011, and was completed in February 2012.

The report concludes that:

1. the use of the incinerator ash as ADCM results in a daily cover material that has no discernible difference from a soil-only daily cover when spread six-inches deep over the active waste area;
2. the use of the ash as a supplemental material for daily cover reduces the site's need for soil, which will help with the long-term site soil balance;
3. the material works well and generates less dust than soil during dry periods, and spreads more uniformly, compared to soil, during wet periods.

The report recommends that the ash used as ADCM should be applied as described in the Work plan prepared by Thiel Engineering in December 2010. The storm water runoff from the stockpiled and spread material must be contained in the landfill and collected as leachate.

The landfill accepts approximately 86 tons of the incineration ash as ADCM per day, which represents 5% of daily tonnage of the waste received at the landfill (1700 tons per day).

The performance evaluation report satisfies DEQ that the ash material is equivalent in performance to six inches of earthen material daily cover in controlling disease, vectors, fire, odors, blowing litter, scavenging, and reducing filtration, and poses no environmental or human health hazard. (DEQ did not evaluate human health risks related to the handling and spreading of the ash as ADC. It is recommended that Coffin Butte consult with OSHA for this analysis.)

DEQ approves the incinerator ash for long-term use as a supplemental material for daily cover material at the landfill. Please note, however, the approval is only for the incinerator ash from the North

EXHIBIT B

Marion County Disposal Facility (NMCDF) located in Woodburn, Oregon. The ash must be used in the manner described in the Work plan and be applied approximately 6" deep.

Effective May 11, 2012; the approved ADCM is no longer subject to the per-ton fees as detailed in OAR 340-097-0120 (6). The fee will be reduced on only the quantity of ADCM that is used as supplemental material for daily cover.

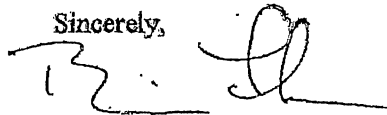
Solid Waste statute and rule allow a fee break of \$.94/ton on the tons of "alternate daily cover" used during each reporting period. (ORS 459.235(4) and OAR 340-097-0120(8)(f)). Alternate daily cover (ADC) is waste used for daily cover at a landfill in place of virgin soil. The amount of solid waste that can be used as daily cover cannot exceed the amount needed to provide the equivalent of six inches of soil used as daily cover.

The DEQ Solid Waste Disposal Report/ Fee Calculation reporting forms require facilities to report both the amount of ADC received and the amount used during the reporting quarter. Facilities calculate the full fee on the amount received and are able to back out the fee break on the amount of ADC used to determine the fees owed to DEQ. The fee break can only be claimed on the amount of ADC used.

Daily ADC usage logs need to be submitted with the report, if the tonnage of ADC used exceeded 15% of the tonnage of residential and commercial domestic solid waste and construction and demolition waste ("counting waste") received during the reporting quarter. This 15% guideline is an industry supported "upper bound" on the amount of daily cover that is needed for efficient operation of a landfill.

If you have any questions concerning this letter, please contact Hugh Gao at (503)378-4977 or by email at hugh@deq.state.or.us.

Sincerely,



Brian Fuller, Manager
Western Region Hazardous and Solid Waste
Permitting and Compliance

BF:hg

cc: Hugh Gao, DEQ-Salem Office
Mary Fritzman, DEQ-Portland Office
Don Alexander, Marion County

X: SolidWaste\SWWRPermitFiles\306\CoffinButte\FAADC NMCDF Ash Appvl (5-12)

September 03, 2010

Don Alexander
Marion County
5155 Silverton Rd NE
Salem, OR 97305

RE: NMCDF Ash

Enclosed are the results of analyses for samples received by the laboratory on 08/23/10 12:14.
The following list is a summary of the Work Orders contained in this report, generated on 09/03/10
17:44.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PTH0714	NMCDF Ash	Site: North Marion County Di:

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Brian Coie, Industrial Services Manager

Marion County 5155 Silvertown Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Ash001	PTH0714-01	Soil	08/23/10 11:30	08/23/10 12:14
Ash002	PTH0714-02	Soil	08/23/10 11:30	08/23/10 12:14
Ash003	PTH0714-03	Soil	08/23/10 11:30	08/23/10 12:14

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Brian Cone, Industrial Services Manager

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Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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Total Metals per EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTH0714-01 (Ash001)		Soil				Sampled: 08/23/10 11:30				
Arsenic	EPA 6020	26.4	—	3.14	mg/kg dry	5x	10H0931	08/27/10 19:38	08/30/10 15:56	
Barium	"	532	—	3.14	"	"	"	"	"	
Cadmium	"	59.9	—	3.14	"	"	"	"	"	
Chromium	"	123	—	6.28	"	"	"	"	"	
Lead	"	1170	—	3.14	"	"	"	"	"	
Selenium	"	1.72	—	0.628	"	1x	"	"	08/29/10 19:13	
Silver	"	6.34	—	3.14	"	5x	"	"	08/30/10 15:56	
PTH0714-02 (Ash002)		Soil				Sampled: 08/23/10 11:30				
Arsenic	EPA 6020	29.6	—	3.05	mg/kg dry	5x	10H0931	08/27/10 19:38	08/30/10 15:59	
Barium	"	851	—	3.05	"	"	"	"	"	
Cadmium	"	49.2	—	3.05	"	"	"	"	"	
Chromium	"	146	—	6.10	"	"	"	"	"	
Lead	"	922	—	3.05	"	"	"	"	"	
Selenium	"	1.61	—	0.610	"	1x	"	"	08/29/10 19:17	
Silver	"	5.09	—	3.05	"	5x	"	"	08/30/10 15:59	
PTH0714-03 (Ash003)		Soil				Sampled: 08/23/10 11:30				
Arsenic	EPA 6020	33.4	—	2.88	mg/kg dry	5x	10H0931	08/27/10 19:38	08/30/10 16:03	
Barium	"	561	—	2.88	"	"	"	"	"	
Cadmium	"	71.7	—	2.88	"	"	"	"	"	
Chromium	"	98.5	—	5.75	"	"	"	"	"	
Lead	"	1410	—	2.88	"	"	"	"	"	
Selenium	"	2.29	—	0.575	"	1x	"	"	08/29/10 19:28	
Silver	"	7.71	—	2.88	"	5x	"	"	08/30/10 16:03	

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Brian L. Cone

Brian Cone, Industrial Services Manager

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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TCLP Metals per EPA 1311/6000/7000 Series Methods
 TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTH0714-01 (Ash001)										
										Soil
										Sampled: 08/23/10 11:30
Arsenic	1311/6020	ND	—	0.0100	mg/l	1x	10H0938	08/28/10 20:58	08/30/10 17:52	
Barium	"	0.243	—	0.0100	"	"	"	"	"	
Cadmium	"	0.0642	—	0.0100	"	"	"	"	"	
Chromium	"	ND	—	0.0200	"	"	"	"	"	
Lead	"	0.0102	—	0.0100	"	"	"	"	"	
Selenium	"	0.0115	—	0.0100	"	"	"	"	"	
Silver	"	ND	—	0.0100	"	"	"	"	"	
PTH0714-02 (Ash002)										
										Soil
										Sampled: 08/23/10 11:30
Arsenic	1311/6020	ND	—	0.0100	mg/l	1x	10H0938	08/28/10 20:58	08/30/10 18:04	
Barium	"	0.260	—	0.0100	"	"	"	"	"	
Cadmium	"	0.0268	—	0.0100	"	"	"	"	"	
Chromium	"	0.0201	—	0.0200	"	"	"	"	"	
Lead	"	ND	—	0.0100	"	"	"	"	"	
Selenium	"	0.0117	—	0.0100	"	"	"	"	"	
Silver	"	ND	—	0.0100	"	"	"	"	"	
PTH0714-03 (Ash003)										
										Soil
										Sampled: 08/23/10 11:30
Arsenic	1311/6020	ND	—	0.0100	mg/l	1x	10H0938	08/28/10 20:58	08/30/10 18:08	
Barium	"	0.364	—	0.0100	"	"	"	"	"	
Cadmium	"	0.0335	—	0.0100	"	"	"	"	"	
Chromium	"	0.178	—	0.0200	"	"	"	"	"	
Lead	"	ND	—	0.0100	"	"	"	"	"	
Selenium	"	0.0117	—	0.0100	"	"	"	"	"	
Silver	"	ND	—	0.0100	"	"	"	"	"	

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Brian L. Cone

Brian Cone, Industrial Services Manager

THE LEADER IN ENVIRONMENTAL TESTING

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Project Manager: Don Alexander	Site: North Marion County Disposal Report Created: 09/03/10 17:44
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Total Mercury per EPA Method 7471A

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTH0714-01 (Ash001)										Soil
										Sampled: 08/23/10 11:30
Mercury	EPA 7471A	3.62	—	1.05	mg/kg dry	10x	10H0792	08/24/10 13:58	08/25/10 14:44	
PTH0714-02 (Ash002)										Soil
										Sampled: 08/23/10 11:30
Mercury	EPA 7471A	2.65	—	0.986	mg/kg dry	10x	10H0792	08/24/10 13:58	08/25/10 14:52	
PTH0714-03 (Ash003)										Soil
										Sampled: 08/23/10 11:30
Mercury	EPA 7471A	5.30	—	0.932	mg/kg dry	10x	10H0792	08/24/10 13:58	08/25/10 14:55	

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Brian Cone, Industrial Services Manager

THE LEADER IN ENVIRONMENTAL TESTING

Marion County 5155 Silverton Rd NE Salem, OR 97305.	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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TCLP Mercury per EPA Methods 1311/7470A
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTH0714-01 (Ash001)				Soil			Sampled: 08/23/10 11:30			
Mercury	1311/7470A	ND	—	0.000200	mg/l	1x	10H0964	08/30/10 11:26	08/31/10 11:35	
PTH0714-02 (Ash002)				Soil			Sampled: 08/23/10 11:30			
Mercury	1311/7470A	ND	—	0.000200	mg/l	1x	10H0964	08/30/10 11:26	08/31/10 11:38	
PTH0714-03 (Ash003)				Soil			Sampled: 08/23/10 11:30			
Mercury	1311/7470A	0.00131	—	0.000200	mg/l	1x	10H0964	08/30/10 11:26	08/31/10 11:40	

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Brian L. Cone

Brian Cone, Industrial Services Manager

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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Percent Dry Weight (Solids) per ASTM D2216-80
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTH0714-01 (Ash001)										Soil
										Sampled: 08/23/10 11:30
% Solids	ASTM D2216-80	77.3	—	0.0100	% by Weight	1x	10H0758	08/24/10 12:30	08/25/10 07:05	
PTH0714-02 (Ash002)										Soil
										Sampled: 08/23/10 11:30
% Solids	ASTM D2216-80	82.0	—	0.0100	% by Weight	1x	10H0758	08/24/10 12:30	08/25/10 07:05	
PTH0714-03 (Ash003)										Soil
										Sampled: 08/23/10 11:30
% Solids	ASTM D2216-80	86.9	—	0.0100	% by Weight	1x	10H0758	08/24/10 12:30	08/25/10 07:05	

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Brian L. Cone

Brian Cone, Industrial Services Manager

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 10H0931 Soil Preparation Method: EPA 3050

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
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Blank (10H0931-BLK1) Extracted: 08/27/10 19:38

Arsenic	EPA 6020	ND	—	0.500	mg/kg wet	1x	—	—	—	—	—	—	08/30/10 14:54	
Barium	"	ND	—	0.500	"	"	—	—	—	—	—	—	"	
Cadmium	"	ND	—	0.500	"	"	—	—	—	—	—	—	"	
Chromium	"	ND	—	1.00	"	"	—	—	—	—	—	—	"	
Lead	"	ND	—	0.500	"	"	—	—	—	—	—	—	"	
Selenium	"	ND	—	0.500	"	"	—	—	—	—	—	—	08/29/10 18:43	
Silver	"	ND	—	0.500	"	"	—	—	—	—	—	—	08/30/10 14:54	

LCS (10H0931-BS1) Extracted: 08/27/10 19:38

Arsenic	EPA 6020	42.0	—	0.490	mg/kg wet	1x	—	49.0	85.8%	(80-120)	—	—	08/30/10 14:57	
Barium	"	41.2	—	0.490	"	"	—	"	84.0%	"	—	—	"	
Cadmium	"	42.7	—	0.490	"	"	—	"	87.0%	"	—	—	"	
Chromium	"	43.4	—	0.980	"	"	—	"	88.5%	"	—	—	"	
Lead	"	44.4	—	0.490	"	"	—	"	90.6%	"	—	—	"	
Selenium	"	59.1	—	0.490	"	"	—	"	120%	"	—	—	08/29/10 18:47	
Silver	"	21.6	—	0.490	"	"	—	24.5	88.1%	"	—	—	08/30/10 14:57	

Matrix Spike (10H0931-MS1) QC Source: PTH0303-01 Extracted: 08/27/10 19:38

Arsenic	EPA 6020	50.4	—	0.539	mg/kg dry	1x	4.81	53.9	84.6%	(75-125)	—	—	08/30/10 15:09	
Barium	"	130	—	0.539	"	"	84.2	"	84.0%	"	—	—	"	
Cadmium	"	47.9	—	0.539	"	"	0.189	"	88.4%	"	—	—	"	
Chromium	"	63.7	—	1.08	"	"	16.2	"	88.2%	"	—	—	"	
Lead	"	60.9	—	0.539	"	"	12.3	"	90.1%	"	—	—	"	
Selenium	"	56.1	—	0.539	"	"	0.199	"	104%	"	—	—	08/29/10 18:58	
Silver	"	23.7	—	0.539	"	"	0.0647	27.0	87.5%	"	—	—	08/30/10 15:09	

Matrix Spike Dup (10H0931-MSD1) QC Source: PTH0303-01 Extracted: 08/27/10 19:38

Arsenic	EPA 6020	51.8	—	0.534	mg/kg dry	1x	4.81	53.4	88.0%	(75-125)	2.62%	(40)	08/30/10 15:13	
Barium	"	138	—	0.534	"	"	84.2	"	101%	"	6.57%	"	"	
Cadmium	"	49.3	—	0.534	"	"	0.189	"	91.9%	"	2.89%	"	"	
Chromium	"	66.7	—	1.07	"	"	16.2	"	94.7%	"	4.60%	"	"	
Lead	"	65.0	—	0.534	"	"	12.3	"	98.7%	"	6.50%	"	"	
Selenium	"	52.8	—	0.534	"	"	0.199	"	98.5%	"	6.04%	"	08/29/10 19:02	
Silver	"	24.1	—	0.534	"	"	0.0647	26.7	90.2%	"	2.04%	"	08/30/10 15:13	

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Brian L. Conner

Brian Conner, Industrial Services Manager

THE LEADER IN ENVIRONMENTAL TESTING

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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TCLP Metals per EPA 1311/6000/7000 Series Methods - Laboratory Quality Control Results
 TestAmerica Portland

QC Batch: 10H0938 Soil Preparation Method: EPA 1311/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
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Blank (10H0938-BLK1) Extracted: 08/28/10 20:58

Arsenic	1311/6020	ND	---	0.0100	mg/l	1x	--	--	--	--	--	--	08/30/10 17:45	
Barium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	

LCS (10H0938-BS1) Extracted: 08/28/10 20:58

Arsenic	1311/6020	1.08	---	0.0100	mg/l	1x	--	1.00	108%	(80-120)	--	--	08/30/10 17:49	
Barium	"	0.988	---	0.0100	"	"	--	"	98.8%	"	--	--	"	
Cadmium	"	1.01	---	0.0100	"	"	--	"	101%	"	--	--	"	
Chromium	"	1.03	---	0.0200	"	"	--	"	103%	"	--	--	"	
Lead	"	1.05	---	0.0100	"	"	--	"	105%	"	--	--	"	
Selenium	"	1.07	---	0.0100	"	"	--	"	107%	"	--	--	"	
Silver	"	0.506	---	0.0100	"	"	--	0.500	101%	"	--	--	"	

Matrix Spike (10H0938-MS1) QC Source: PIH0714-01 Extracted: 08/28/10 20:58

Arsenic	1311/6020	1.07	---	0.0100	mg/l	1x	0.00380	1.00	107%	(75-125)	--	--	08/30/10 18:00	
Barium	"	1.21	---	0.0100	"	"	0.243	"	96.9%	"	--	--	"	
Cadmium	"	1.06	---	0.0100	"	"	0.0642	"	99.6%	"	--	--	"	
Chromium	"	1.06	---	0.0200	"	"	0.0189	"	104%	"	--	--	"	
Lead	"	0.998	---	0.0100	"	"	0.0102	"	98.8%	"	--	--	"	
Selenium	"	1.04	---	0.0100	"	"	0.0115	"	102%	"	--	--	"	
Silver	"	0.495	---	0.0100	"	"	ND	0.500	99.0%	"	--	--	"	

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Brian L. Cone

Brian Cone, Industrial Services Manager

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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Total Mercury per EPA Method 7471A - Laboratory Quality Control Results
 TestAmerica Portland

QC Batch: **10H0792** Soil Preparation Method: **EPA 7471A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (10H0792-BLK1)													Extracted: 08/24/10 13:58			
Mercury	EPA 7471A	ND	--	0.0962	mg/kg wet	1x	--	--	--	--	--	--	08/25/10 14:12			
LCS (10H0792-BS1)													Extracted: 08/24/10 13:58			
Mercury	EPA 7471A	0.634	--	0.0976	mg/kg wet	1x	--	0.610	104%	(80-120)	--	--	08/25/10 14:15			
LCS Dup (10H0792-BSD1)													Extracted: 08/24/10 13:58			
Mercury	EPA 7471A	0.630	--	0.0990	mg/kg wet	1x	--	0.619	102%	(80-120)	0.738% (20)	--	08/25/10 14:18			
Duplicate (10H0792-DUP1)													QC Source: PTH0714-01		Extracted: 08/24/10 13:58	
Mercury	EPA 7471A	4.33	--	1.21	mg/kg dry	10x	3.62	--	--	--	17.9% (40)	--	08/25/10 14:34			
Matrix Spike (10H0792-MS1)													QC Source: PTH0714-01		Extracted: 08/24/10 13:58	
Mercury	EPA 7471A	5.05	--	1.16	mg/kg dry	10x	3.62	0.727	196%	(75-125)	--	--	08/25/10 14:37	MHA		
Matrix Spike Dup (10H0792-MSD1)													QC Source: PTH0714-01		Extracted: 08/24/10 13:58	
Mercury	EPA 7471A	4.73	--	1.12	mg/kg dry	10x	3.62	0.701	158%	(75-125)	6.52% (40)	--	08/25/10 14:39	M		

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Brian L. Cone

Brian Cone, Industrial Services Manager



EXHIBIT C

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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TCLP Mercury per EPA Methods 1311/7470A - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 10H0964 Soil Preparation Method: EPA 1311/7470A

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Extracted: 08/30/10 11:24														
Blank (10H0964-BLK1)														
Mercury	1311/7470A	ND	—	0.000200	mg/l	1x	—	—	—	—	—	—	08/31/10 11:22	
Extracted: 08/30/10 11:24														
LCS (10H0964-BS1)														
Mercury	1311/7470A	0.00500	—	0.000200	mg/l	1x	—	0.00500	99.9%	(85-115)	—	—	08/31/10 11:25	
Extracted: 08/30/10 11:24														
LCS Dup (10H0964-BSD1)														
Mercury	1311/7470A	0.00482	—	0.000200	mg/l	1x	—	0.00500	96.5%	(85-115)	3.48% (20)	—	08/31/10 11:27	
QC Source: PTH0714-01 Extracted: 08/30/10 11:24														
Duplicate (10H0964-DUP1)														
Mercury	1311/7470A	ND	—	0.000200	mg/l	1x	ND	—	—	—	14.8% (20)	—	08/31/10 11:33	
QC Source: PTH0714-01 Extracted: 08/30/10 11:24														
Matrix Spike (10H0964-MS1)														
Mercury	1311/7470A	0.00449	—	0.000200	mg/l	1x	0.000133	0.00500	87.2%	(75-125)	—	—	08/31/10 11:30	

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Brian Cone, Industrial Services Manager

THE LEADER IN ENVIRONMENTAL TESTING

Marion County 5155 Silverton Rd NE Salem, OR 97305	Project Name: NMCDF Ash Project Number: Site: North Marion County Disposal Project Manager: Don Alexander	Report Created: 09/03/10 17:44
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Percent Dry Weight (Solids) per ASTM D2216-80 - Laboratory Quality Control Results
 TestAmerica Portland

QC Batch: 10H0758 Soil Preparation Method: Dry Weight

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (10H0758-DUP1)			QC Source: PTH0359-06				Extracted: 08/24/10 12:30							
% Solids	ASTM D2216-80	76.8	---	0.0100	% by Weight	1x	77.2	--	--	--	0.622% (20)		08/25/10 07:05	
Duplicate (10H0758-DUP2)			QC Source: PTH0359-20				Extracted: 08/24/10 12:30							
% Solids	ASTM D2216-80	77.7	---	0.0100	% by Weight	1x	77.5	--	--	--	0.231% (20)		08/25/10 07:05	

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Brian L. Cone

Brian Cone, Industrial Services Manager

Marion County

5155 Silverton Rd NE
Salem, OR 97305

Project Name: **NMCDF Ash**
Project Number: Site: North Marion County Disposal
Project Manager: Don Alexander

Report Created:
09/03/10 17:44

Notes and Definitions

Report Specific Notes:


MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Brian Cone, Industrial Services Manager

EXHIBIT C

CERTIFICATION SUMMARY

TestAmerica Portland

Method	Matrix	Washington
1311/6020	Soil	X
1311/7470A	Soil	X
ASTM D2216-80	Soil	
EPA 6020	Soil	X
EPA 7471A	Soil	X

TestAmerica Portland



Brian Cone, Industrial Services Manager

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