



Fax

To: **BUYER: John Estep**

From: Jamie McClain – American Rock Salt Co.

Fax: (304) 558-3970

Pages:

Phone: (304) 558-2566

Date: November 1, 2023

Re: **SEALED BID: Roadway Salt**

CC:

Urgent

For Review

Please Comment

Please Reply

SEALED BID: Roadway Salt

BUYER: John Estep

SOLICITATION NO.: CRFQ 0803 DOT2400000026

BID OPENING DATE: November 1, 2023

BID OPENING TIME: 1:30 PM, EST

FAX NUMBER: 304-558-3970

RECEIVED
 2023 NOV - 1 PM 12:15
 WV PURCHASING
 DIVISION

**ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 1 - Delivery**

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 1			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Boone</i>	Clinton @ WV85	100	
	Rock Creek	0	
	Seth	0	
Boone County Total Estimated		100	No Bid
<i>Clay</i>	Widen Road & CR 11	0	
	Maysel	0	
Clay County Total Estimated		0	No Bid
<i>Kanawha</i>	Chelyan	0	
	Elkview	0	
	North Charleston	0	
	St. Albans	0	
	I-64 @ Rt. 119 and Penn. Avenue	300	
	I-77 @ Sissonville	300	
	I-79 @ Amma	300	
Corridor G @ Alum Creek	300		
Kanawha County Total Estimated		1,200	No Bid
<i>Mason</i>	Glenwood	0	
	Pt. Pleasant @ Fairground Rd.	300	
	Pt. Pleasant @ Jackson Ave.	0	
Mason County Total Estimated		300	No Bid
<i>Putnam</i>	Red House	0	
	Hurricane @ Rt. 34	0	
	I-64 @ Scary Creek	300	
Putnam County Total Estimated		300	No Bid
DISTRICT 1 TOTAL		1,900	

ROADWAY SALT - SODIUM CHLORIDE**Attachment A Pricing Pages****District 2 - Delivery**

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 2			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Cabell</i>	Barboursville / Cabell Co. HQ	800	
	Huntington I-64 Section 1	850	
	Huntington 31st Bridge	0	
	Huntington 17th St. Bridge	0	
<i>Cabell County Total</i>		1,650	No Bid
<i>Lincoln</i>	West Hamlin	700	
	Yawkey	200	
	Harts	300	
<i>Lincoln County Total</i>		1,200	No Bid
<i>Logan</i>	Corridor G @ Chapmanville	550	
	Wilkinson Substation	150	
	Man Substation	100	
	Hickory Lane	0	
<i>Logan County Total</i>		800	No Bid
<i>Mingo</i>	Corridor G @ Miller's Creek, Bldg #03011	100	
	Mingo Cty @ Miller's Creek, Bldg #03025	100	
	Gilbert Substation	100	
	Mingo 119 South	0	
<i>Mingo County Total</i>		300	No Bid
<i>Wayne</i>	Pritchard Substation	0	
	Wayne County Headquarters	1,300	
	Crum Substation	0	
	Heartland Intermodal Gateway	0	
<i>Wayne County Total</i>		1,300	No Bid
DISTRICT 2 TOTAL		5,250	

ROADWAY SALT - SODIUM CHORIDE
Attachment A Pricing Pages
District 3 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 3			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Calhoun</i>	Millstone	500	
	<i>Calhoun County Total</i>	500	No Bid
<i>Jackson</i>	Ripley / Jackson Co. HQ	1,900	
	I-77 @ Medina	900	
	<i>Jackson County Total</i>	2,800	No Bid
<i>Pleasants</i>	Belmont	1,000	
	<i>Pleasants County Total</i>	1,000	No Bid
<i>Ritchie</i>	APD Pennsboro	700	
	Ellenboro / Harrisville Substation	2,000	
	Greenwood	350	
	Corridor D @ Nutter Farm	350	
	Smithville Substation	350	
	<i>Ritchie County Total</i>	3,750	No Bid
<i>Roane</i>	Lefthand @ WV 36	150	
	Ambler Ridge Substation @ US 119	150	
	Roane County HQ	1,200	
	<i>Roane County Total</i>	1,500	No Bid
<i>Wirt</i>	Harrisville Substation	750	
	<i>Wirt County Total</i>	750	No Bid
<i>Wood</i>	Parkersburg @ Rt. 95S	100	
	I-77 @ Parkersburg	100	
	Corridor D @ Riverhill	100	
	<i>Wood County Total</i>	300	No Bid
DISTRICT 3 TOTAL		10,600	

ROADWAY SALT - SODIUM CHLORIDE

Attachment A Pricing Pages

District 4 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 4			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Doddridge</i>	West Union	1,000	
<i>Doddridge County Total</i>		1,000	\$110.82
<i>Harrison</i>	Harrison Co. HQ	5,500	
	Saltwell	500	
	Lost Creek Substation	1,500	
	Tunnel Hill Substation	1,500	
<i>Harrison County Total</i>		9,000	\$107.50
<i>Marion</i>	Marion Co. HQ	1,500	
	Mannington Substation	1,000	
<i>Marion County Total</i>		2,500	\$95.00
<i>Monongalia</i>	Goshen Rd. Substation	2,000	
	Monongalia Co. HQ	5,000	
	Pentress Substation	1,000	
<i>Monongalia County Total</i>		8,000	\$88.50
<i>Preston</i>	Bruceton Mills Substation	2,500	
	Preston Co. HQ	1,200	
	Terra Alta Substation	1,000	
	Fellowsville Substation	1,000	
	Aurora Substation	1,000	
	Cooper's Rock Substation	2,000	
<i>Preston County Total</i>		8,700	\$89.50
<i>Taylor</i>	Taylor Co. HQ	1,600	
<i>Taylor County Total</i>		1,600	\$95.00
DISTRICT 4 TOTAL		30,800	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 5 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 5			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Berkeley</i>	Martinsburg Headquarters - 0571 Storage Bldg	500	
	Tabler Station - 0502 Storage Bldg	500	
	Berkeley County Headquarters	500	
Berkeley County Total		1,500	\$128.21
<i>Grant</i>	Grant Co. HQ	200	
	Mt. Storm Substation	1,000	
	Corridor H @ Knobley Road	500	
Grant County Total		1,700	\$110.67
<i>Hampshire</i>	Hampshire Co. HQ	500	
	Capon Bridge Substation	400	
	Stanesville	300	
Hampshire County Total		1,200	\$115.43
<i>Hardy</i>	Hardy Co. HQ	500	
	Baker Substation	500	
Hardy County Total		1,000	\$122.00
<i>Jefferson</i>	Jefferson County Headquarters - 0519 Storage Bldg	500	
	9/340 Expressway Headquarters - 0564 Storage Bldg	500	
Jefferson County Estimated Total		1,000	\$131.66
<i>Mineral</i>	Mineral Co. HQ	500	
	Skyline Substation	400	
	Short Gap Substation	300	
	District 5 HQ	100	
Mineral County Total		1,300	\$112.00
<i>Morgan</i>	Morgan Co. HQ	500	
	Largent Substation	300	
Morgan County Total		800	\$118.52
DISTRICT 5 TOTAL		8,500	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 6 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 6			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Brooke</i>	Brooke County HQ	1,500	
	US 22 Substation	1,500	
Brooke County Total		3,000	\$87.50
<i>Hancock</i>	Hancock County HQ	2,000	
	Hancock County Total		\$90.00
<i>Marshall</i>	Marshall Co. HQ	2,900	
	Lynn Camp Substation	700	
	Cameron Substation	1,550	
	Sand Hill Substation	650	
Marshall County Total		5,800	\$111.00
<i>Ohio</i>	Ohio Co. HQ	2,000	
	I-70 Interstate HQ	3,500	
Ohio County Total		5,500	\$86.00
<i>Tyler</i>	Tyler Co. HQ	1,100	
	Centerville Substation	800	
Tyler County Total		1,900	\$106.00
<i>Wetzel</i>	Wetzel Co. HQ	1,100	
	Pine Grove Substation	700	
	Hundred Substation	900	
Wetzel County Total		2,700	\$114.00
DISTRICT 6 TOTAL		20,900	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 7 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 7			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Barbour</i>	Barbour Co. HQ (000111)	1400	
	Belington Substation (000113)	1100	
Barbour County Total		2,500	\$101.77
<i>Braxton</i>	Braxton County HQ (000444)	800	
	Heaters Substation (000431)	600	
	Coon Knob Substation (000405)	1200	
	Burnsville Substation (000432)	1300	
Braxton County Total		3,900	\$118.93
<i>Gilmer</i>	Gilmer County HQ (001110)	700	
Gilmer County Total		700	\$121.44
<i>Lewis</i>	Lewis County HQ (002108)	1200	
	APD (Weston Mudlick) (002187)	900	
Lewis County Total		2,100	\$111.12
<i>Upshur</i>	Clow Lot/Upshur County HQ (004912)	2400	
	Tennerton/Upshur County SubHQ (004903)	100	
	Kanawha Head	800	
Upshur County Total		3,300	\$117.61
<i>Webster</i>	Cherry Falls	400	
	RT 20/Cowen Substation (005110)	0	
	Webster County HQ @ Bolair	1000	
	Hacker Valley Substation (005120)	100	
Webster County Total		1,500	\$128.35
DISTRICT 7 TOTAL		14,000	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 8 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 8			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Pendleton</i>	Franklin, 220 North	500	
	Judy Gap Substation	400	
	Brandywine Stockpile	250	
	Sugar Grove Substation	300	
	Onego Stockpile	50	
	Franklin Rt. 220 South Lot	200	
<i>Pendleton County Total</i>		1,700	\$125.45
<i>Pocahontas</i>	Pocahontas County HQ	800	
	Seebert Stockpile	500	
	Green Bank Substation	400	
	Bartow Lot	500	
	Snowshoe Stockpile	100	
	Slaty Fork Stockpile	300	
<i>Pocahontas County Total</i>		2,600	\$130.34
<i>Randolph</i>	Randolph Co. HQ	800	
	Harman Substation	550	
	Coalton Substation	650	
	Alpena Saltshed	150	
	Valley Head Substation	500	
	Mill Creek Substation	550	
	Pickens Substation	300	
	Corridor H	800	
<i>Randolph County Total</i>		4,300	\$117.83
<i>Tucker</i>	Tucker Co. HQ	700	
	Thomas Substation	700	
	Corrido H - Thomas	500	
<i>Tucker County Total</i>		1,900	\$110.99
DISTRICT 8 TOTAL		10,500	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 9 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 9			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Fayette</i>	Oak Hill APD	5,700	
	Lookout Substation	0	
	Falls View Substation	500	
<i>Fayette County Estimated Total</i>		6,200	No Bid
<i>Greenbrier</i>	Greenbrier Co. HQ	1,500	
	Crawley Substation	3,200	
	Hart's Run Substation	1,300	
<i>Greenbrier County Estimated Total</i>		6,000	No Bid
<i>Monroe</i>	Monroe Co. HQ	800	
	Peterstown Substation	600	
<i>Monroe County Estimated Total</i>		1,400	No Bid
<i>Nicholas</i>	Nicholas Co. HQ	3,000	
	Curtin Substation	2,000	
	Corridor L/Muddlety Substation	3,000	
<i>Nicholas County Estimated Total</i>		8,000	No Bid
<i>Summers</i>	Summers Co. HQ	1,400	
<i>Summers County Estimated Total</i>		1,400	No Bid
DISTRICT 9 TOTAL		23,000	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
District 10 - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

DISTRICT 10			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>McDowell</i>	McDowell County HQ	1,800	No Bid
	Yukon Substation	270	
	Johnny Cake Substation	450	
	Raysal	450	
<i>McDowell County Estimated Total</i>		2,970	No Bid
<i>Mercer</i>	Mercer County HQ	2,340	No Bid
	Flat Top Substation	270	
	I-77 near Princeton	2,340	
<i>Mercer County Estimated Total</i>		4,950	No Bid
<i>Raleigh</i>	Raleigh County HQ	7,200	No Bid
	Bolt Substation	90	
	Bragg Substation	4,500	
<i>Raleigh County Estimated Total</i>		11,790	No Bid
<i>Wyoming</i>	Wyoming County HQ	2,700	No Bid
	Still Run Substation	900	
	Hanover Outpost	90	
<i>Wyoming County Estimated Total</i>		3,690	No Bid
DISTRICT 10 TOTAL		23,400	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
WV Parkways Authority - Delivery

Vendor shall complete ATT A by providing a price per ton for the delivery of roadway salt to any or all Counties listed. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated quantities. Exhibit A - "WVDOH Delivery Site Information" contains detailed location and contact information for delivery site locations listed below.

Vendor Name: American Rock Salt Company LLC

WV PARKWAYS AUTHORITY			
County	Delivery Site Location	Estimated Quantity	Vendor Bid Price (cost per ton)
<i>Kanawha</i>	Chelyan Maintenance	3000	
	Standard Maintenance	2900	
<i>Kanawha County Estimated Total</i>		5,900	No Bid
<i>Mercer</i>	Princeton Maintenance	1500	
	<i>Mercer County Estimated Total</i>		1,500
<i>Raleigh</i>	Beckley Maintenance	6700	
	Ghent Maintenance	4100	
<i>Raleigh County Estimated Total</i>		10,800	No Bid
WV PARKWAYS' TOTAL		18,200	

ROADWAY SALT - SODIUM CHLORIDE
Attachment A Pricing Pages
Agency Pick-up

Vendor shall provide a physical 911 address and provide a price per ton for roadway salt to be available for pick-up by WVDOH Agencies. Vendor pricing shall include cost of Vendor loading Agency trucks.

Vendor Storage Site Locations	Vendor Bid Price (cost per ton)
2124 Schoonmaker Ave. Belle Vernon, PA 15012	\$78.00/ton pickup



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Quote
Highways

Proc Folder: 1302451			Reason for Modification:
Doc Description: Roadway Salt - Sodium Chloride 6624C021			
Proc Type: Central Master Agreement			
Date Issued	Solicitation Closes	Solicitation No	Version
2023-10-13	2023-11-01 13:30	CRFQ 0803 DOT2400000026	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: 106924
Vendor Name : American Rock Salt Co., LLC
Address : PO Box 190
Street : 5520 Rt. 63
City : Mount Morris
State : New York Country :United States Zip : 14510
Principal Contact : Jamie A. McClain
Vendor Contact Phone: (888) 762-7258 Extension:

FOR INFORMATION CONTACT THE BUYER

John W Estep
304-558-2566
john.w.estep@wv.gov

Vendor Signature X *Jamie A McClain* FEIN# 16-1516458 DATE October 27, 2023

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION
REQUEST FOR QUOTATION:
 The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways and the West Virginia Parkways Authority to establish an open end, multiple award contract for the delivery of sodium chloride, F.O.B. for use in snow removal and ice control throughout the state of West Virginia. Vendor may also provide options for WVDOH pick-up from its storage sites. Per the bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO		SHIP TO	
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA	
No City US		No City US	
WV		WV	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Roadway Salt - Sodium Chloride - DELIVERY	0.00000	TON		

Comm Code	Manufacturer	Specification	Model #
46161506			

Extended Description:

DELIVERY of Roadway Salt - Sodium Chloride for use in snow removal and ice control throughout the state of West Virginia.

VENDOR NOTE: Bid evaluation will be based on the bid prices submitted on the Pricing Pages Attachment A (ATT A) and Attachment B(ATT B). Vendor's entries of bid prices or other notations made in the wvOASIS commodity lines/descriptions will not be considered for bid evaluation or award.

INVOICE TO		SHIP TO	
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA	
No City US		No City US	
WV		WV	
		VARIOUS LOCATIONS AS INDICATED BY ORDER	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Roadway Salt - Sodium Chloride - PICK-UP	0.00000	TON		

Comm Code	Manufacturer	Specification	Model #
46161506			

Extended Description:

PICK-UP of Roadway Salt - Sodium Chloride for use in snow removal and ice control throughout the state of West Virginia.

VENDOR NOTE: Bid evaluation will be based on the bid prices submitted on the Pricing Pages Attachment A (ATT A) and Attachment B(ATT B). Vendor's entries of bid prices or other notations made in the wvOASIS commodity lines/descriptions will not be considered for bid evaluation or award.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Tech Questions due by 10:00am	2023-10-23

	Document Phase	Document Description	Page
DOT2400000026	Final	Roadway Salt - Sodium Chloride 6624C021	4

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. PREBID MEETING: The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A MANDATORY PRE-BID meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted emails should have the solicitation number in the subject line.

Question Submission Deadline: **October 23, 2023 by 10:00am**

Submit Questions to: **John Estep**
2019 Washington Street, East
Charleston, WV 25305
Fax: (304) 558-3970
Email: john.w.estep@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted on or before the date and time of the bid opening listed in section 7 below. Vendors can submit bids electronically through *wvOASIS*, in paper form delivered to the Purchasing Division at the address listed below either in person or by courier, or in facsimile form by faxing to the Purchasing Division at the number listed below. Notwithstanding the foregoing, the Purchasing Division may prohibit the submission of bids electronically through *wvOASIS* at its sole discretion. Such a prohibition will be contained and communicated in the *wvOASIS* system resulting in the Vendor's inability to submit bids through *wvOASIS*. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via email. Bids submitted in paper or facsimile form must contain a signature. Bids submitted in *wvOASIS* are deemed to be electronically signed.

Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason.

For Request for Proposal ("RFP") Responses Only: Submission of a response to a Request for Proposal is not permitted in *wvOASIS*. In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal prior to the bid opening date and time identified in Section 7 below, plus _____ convenience copies of each to the Purchasing Division at the address shown below. Additionally, the Vendor should clearly identify and segregate the cost proposal from the technical proposal in a separately sealed envelope.

Revised 8/24/2023

Bid Delivery Address and Fax Number:

Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130
Fax: 304-558-3970

A bid submitted in paper or facsimile form should contain the information listed below on the face of the submission envelope or fax cover sheet. Otherwise, the bid may be rejected by the Purchasing Division.

VENDOR NAME:

BUYER: JOHN ESTEP
SOLICITATION NO.: CRFQ 0803 DOT2400000026
BID OPENING DATE: November 1, 2023
BID OPENING TIME: 1:30 pm
FAX NUMBER: 304-558-3970

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: November 1, 2023 @ 1:30 pm

Bid Opening Location: Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

10. ALTERNATE MODEL OR BRAND: Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

13. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

15. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and must include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. Any request for reciprocal preference must include with the bid any information necessary to evaluate and confirm the applicability of the preference. A request form to help facilitate the request can be found at: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37 and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

19. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform or lacks the integrity and reliability to assure good-faith performance.”

20. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”

21. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

22. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

23. EMAIL NOTIFICATION OF AWARD: The Purchasing Division will attempt to provide bidders with e-mail notification of contract award when a solicitation that the bidder participated in has been awarded. For notification purposes, bidders must provide the Purchasing Division with a valid email address in the bid response. Bidders may also monitor wvOASIS or the Purchasing Division's website to determine when a contract has been awarded.

24. ISRAEL BOYCOTT CERTIFICATION: Vendor's act of submitting a bid in response to this solicitation shall be deemed a certification from bidder to the State that bidder is not currently engaged in, and will not for the duration of the contract, engage in a boycott of Israel. This certification is required by W. Va. Code § 5A-3-63.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

Term Contract

Initial Contract Term: The Initial Contract Term will be for a period of one (1) year from the effective date. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to zero (0) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Alternate Renewal Term – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____ days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

the contract will continue for _____ years;

the contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

One-Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

Construction/Project Oversight: This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and continues until the project for which the vendor is providing oversight is complete.

Other: Contract Term specified in _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

Open End Contract: Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.

Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

One-Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

Construction: This Contract is for construction activity more fully defined in the specifications.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Automobile Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Professional/Malpractice/Errors and Omission Insurance in at least an amount of: _____ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

Commercial Crime and Third Party Fidelity Insurance in an amount of: _____ per occurrence.

Cyber Liability Insurance in an amount of: _____ per occurrence.

Builders Risk Insurance in an amount equal to 100% of the amount of the Contract.

Pollution Insurance in an amount of: _____ per occurrence.

Aircraft Liability in an amount of: _____ per occurrence.

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

_____ for _____.

Liquidated Damages Contained in the Specifications.

Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in www.state.wv.us/admin/purchase/privacy.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR NON-CONFLICT: Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
 1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
 2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES: This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Jamie A. McClain, Marketing Manager

(Address) 5520 Rt. 63, PO Box 190, Mt. Morris, NY 14510

(Phone Number) / (Fax Number) (888) 762-7258 / (585) 243-7676


(email address) customerservice@americanrocksalt.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

American Rock Salt Co., LLC

(Company)



(Signature of Authorized Representative)

Jamie A. McClain, Marketing Manager

(Printed Name and Title of Authorized Representative) (Date)

(888) 762-7258 / (585) 243-7676

(Phone Number) (Fax Number)

customerservice@americanrocksalt.com

(Email Address)

**REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride**

SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways and the West Virginia Parkways Authority to establish an open end, multiple award contract for the delivery of sodium chloride, F.O.B. for use in snow removal and ice control throughout the state of West Virginia. Vendor may also provide options for WVDOH pick-up from its storage sites.

2. **DEFINITIONS:** The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1 **“ADO” or “Delivery Order”** - a written order entered by WVDOH personnel in the wvOASIS financial system against a master agreement, authorizing quantities of commodities and/or services to be delivered in accordance with all terms, conditions, and prices stipulated in the original contract.

 - 2.2 **“ASTM International” and “ASTM”** – the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services, formerly known as the American Society for Testing and Materials. Reference: www.astm.org

 - 2.3 **“Attachment A,” “Pricing Pages,” or “ATT A”** – interchangeable terms referring to the schedule of Pricing Pages attached hereto as Attachment A (“ATT A”) upon which Vendor should list its pricing for the delivery of sodium chloride to designated WVDOH locations or for pick-up from Vendor storage locations.

 - 2.4 **“Contract Item” or “Item”** – the list of items available for Vendor to provide pricing as identified in Section 3 of this Solicitation and referenced throughout.

 - 2.5 **“Contractor” or “Vendor”** – interchangeable terms referring to any person or entity that submits a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded Contract Items through this contract.

 - 2.6 **“Emergency Requests”**- requests for Contract Items to be fulfilled without delay, owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a WVDOH District Engineer or their designee.

 - 2.7 **“F.O.B.” or “Free on Board”** – indicates that the price for goods includes delivery at the Vendor’s expense to a specified point, and that the Vendor retains liability for loss or damage until the goods are delivered.

REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride

- 2.8 “Liquidated Damages”** - monetary compensation due from the Vendor in the event the Vendor’s performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as amended, and calculated from the table posted in Section 6.3.1 of these Specifications.
- 2.9 “MSDS” and “Material Safety Data Sheets”** – detailed informational documents provided by manufacturers outlining the physical and chemical properties of a product, potential physical and health hazards, and procedures for safe handling.
- 2.10 “MP”** - refers to a Materials Procedure per the Materials Control, Soils, and Testing Division of the West Virginia Division of Highways. Reference: <https://transportation.wv.gov/highways/mcst/Pages/WVDOH-Materials-Procedures.aspx>
- 2.11 “Solicitation”** – the official notice of an opportunity to supply the State with goods or services.
- 2.12 “Roadway Salt,” “Sodium Chloride,” or “Material”** – solid masses of salt crystals (NaCl) for use in the de-icing of roadways.
- 2.13 “Standard Specs”** – refers to the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, most recent edition, as modified or amended by all subsequent Supplemental Specifications.
- 2.14 “WVDOH” or “Agency”**– means the West Virginia Division of Highways.
- 2.15 “WV Parkways” and “Agency”** – means the West Virginia Parkways Authority.

3. GENERAL REQUIREMENTS:

- 3.1 Standard Specifications Roads and Bridges:** The following Standard Specs Sections shall apply, as applicable, to the administration of this contract: 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

Material, equipment, and performance of this contract shall conform, but not be limited to, the requirements of Sections 636 and 715, as amended.

A free electronic copy of the Standard Specs may be obtained by sourcing: <https://transportation.wv.gov/highways/TechnicalSupport/specifications/Pages/default.aspx>

**REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride**

3.2 Contract Items and Mandatory Requirements: Vendor shall provide Agency with the Contract Items specified herein on an open-end and continuing basis, F.O.B. destination or by Agency pick-up from Vendor storage site. Contract Items must meet or exceed the mandatory requirements as shown below.

3.2.1 Sodium Chloride: Vendor provided sodium chloride shall conform to the requirements of ASTM D632 (Reference Exhibit 1 "EXH 1") and testing requirements of ASTM E534 (Reference Exhibit 2 "EXH 2"). Vendor shall provide its sodium chloride supply source, the supplier's certification of quality and gradation, and MSDS information with its bid submission. (Reference

3.2.2 Anti-Clumping Material: If an anti-clumping agent may potentially be applied to Vendor provided sodium chloride, Vendor shall provide MSDS information for its anti-clumping agent with its bid submission.

3.2.3 Sampling and Testing: Acceptance shall be based on approval of the suppliers' certification of quality and gradation. MCS&T may conduct sampling and testing at any time throughout the term of this contract to verify the quality and/or gradation of Vendor provided sodium chloride. Sampling and testing inquiries should be directed to:

WVDOH Materials Control, Soils and Testing Division
190 Dry Branch Road
Charleston, WV 25306
Phone: 304-558-3160

3.2.4 Moisture Content: Delivered material shall be covered in transit and moisture content shall not exceed 2.0% by weight for stockpile delivery. Laboratory testing for moisture shall be administered in accordance with ASTM E534, as amended, at any time during the delivery. Upon visual inspection by the Agency/WVDOH District Manager or designee, any supplied sodium chloride that does not appear to meet ASTM D632 standards will be sampled and tested by the WVDOH. In accordance with ASTM D632, no less than three (3) samples will be randomly taken from the delivered material by Agency personnel, witnessed, and signed off on by the delivery driver. The supplier will be notified of sampling within 48 hours and test results within seven (7) business days of test completion. Upon testing, the supplier shall be responsible for moisture content in excess of 2.0% per delivery and shall deduct the excess weight from the price.

REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride

For example: If a delivery of 75 tons costs \$45.00/ton and the moisture content is found to be 3.5%, the adjusted weight will be calculated as follows:

- $3.5\% - 2.0\% = 1.5\%$ (*percentage in excess of 2.0%*)
- $75 \text{ tons} \times \$45.00 = \$3,375.00$ (*original delivery cost*)
- $\$3,375.00 \times 1.5\% = \50.63 (*1.5% of the original delivery cost*)
- $\$3,375.00 - \$50.63 = \$3,324.37$ (*total adjusted price*)

3.2.5 Unacceptable Material: Upon visual observation and, at the discretion of the WVDOH District Engineer or designee, if sodium chloride provided by Vendor is deemed unsatisfactory or in violation of ASTM D632, the Agency reserves the right to accept and exercise the price adjustment formula outlined in Section 3.2.4 or reject the delivery.

3.2.5.1 Sodium chloride that contains large clumps or foreign material (i.e., dark colored contaminants, charcoal, cinders, or debris) will be rejected immediately.

3.2.5.2 The decision of the WVDOH District Engineer or their designee regarding unacceptable materials shall be final per Standard Specs Section 105.1, as amended. Rejected material shall be removed immediately by the Vendor at no cost to the Agency and arrangements shall be made with the ordering Agency to replace the rejected order amount within five (5) days of its notice of unacceptable material. Vendor shall not charge a restocking fee if returned materials are in resalable condition.

3.2.5.3 If the supplier disputes the WVDOH District Manager or designee's determination, they may file a complaint with the WVDOH Operations Division Director for a review and final decision within seven (7) business days of receiving notification of the unacceptable material.

4. CONTRACT AWARD: This Contract is intended to provide Agencies with a purchase price per ton for roadway salt. A Contract shall be awarded to all qualified Vendors providing the lowest bid per County (delivery) and whose materials meet the required specifications of this Contract. A WVDOH District/County map is provided as Exhibit 4 ("EXH 4")

4.1 Pricing Pages: Vendor shall complete ATT A by providing a bid price per ton for sodium chloride and factor into its bid price any equipment, materials, delivery, and labor to provide the Contract Item. Vendor shall NOT add, delete, or modify spreadsheet column and row headers, descriptions, units of measure, or estimated

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quantities on ATT A. Making any such changes to the format or failure to complete ATT A in its entirety may result in the disqualification of Vendor's bid.

- 4.1.1 Vendor should type or electronically enter the information into the Pricing Page spreadsheets to prevent errors in the evaluation. In most cases, the Vendor can request an electronic copy of the Pricing Page spreadsheets for bid purposes by sending an email request to: John.W.Estep@wv.gov.
- 4.1.2 Vendor shall provide a price per ton for the delivery of roadway salt, F.O.B., to any or all District/County delivery sites identified on ATT A. Detailed Agency delivery site information by District is provided as Exhibit 3 ("EXH 3").
- 4.1.3 Vendor may provide a price per ton and storage location information for Agency pick-up of roadway salt on ATT A. Vendor pricing shall include the loading of Agency vehicles by Vendor in its pricing.
- 4.1.4 Vendor entries of bid prices or other notations made in wvOASIS Commodity Line Descriptions will not be considered for bid evaluation or award. Submitting Pricing Pages other than those provided with this solicitation shall result in the disqualification of all Contract Items bid.

4.2 **Cooperative Contracting:** Purchase prices on all Contract Items in this contract, available for the WVDOH and the West Virginia Parkways Authority, shall be adoptable for other public agencies upon their request. Agencies under the authority of the West Virginia Purchasing Division must receive prior approval by the Purchasing Director.

5. ORDERING, DELIVERIES, GUARANTEES, AND REPORTS:

- 5.1 **Ordering:** Vendor shall accept orders through regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, email address, locations, and ordering/billing/ payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept online orders through a secure internet ordering portal/website. If Vendor can accept online orders, it shall include in its response a brief description of how Agencies may utilize the online ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.
- 5.2 **Agency Delivery Orders ("ADO"):** District personnel must issue an ADO from wvOASIS for specific quantities of material to be delivered to Agency locations listed on ATT A or for pick-up from Vendor locations listed on ATT A as well as the agreed upon date(s) of delivery and/or pick-up of material. The ADO must be created in wvOASIS and approved to "Final", prior to placing the order with the Vendor. The

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Agency is responsible for creating the ADO in wvOASIS and is required to submit the approved order, in writing, directly to the Vendor via mail, email or fax. **Verbal communication with the Vendor is not considered an official order.** In the event the Vendor denies an order or if there are changes to an ADO, the District must process a change order to the approved ADO issued from wvOASIS.

5.2.1 Emergency Requests: Emergency requests received from an Agency shall be initiated within two (2) business days of receipt by Vendor. The determination of an emergency request will be in accordance with Section 2.6 of this Solicitation and will be prominently noted on the ADO. Once complete, the ADO shall be sent to Vendor via fax, email, or mail.

5.2.1.1 Emergency requests shall be treated as a priority and fulfilled by Vendor without delay. Emergency orders shall be paid at a rate of 105% of the Vendor's awarded price.

5.2.2 Extended Delivery Orders: The WVDOH may submit an ADO to Vendor for multiple, successive deliveries of sodium chloride over a series of dates, as designated on the ADO. The Agency shall prominently note "Extended Delivery Order" on associated ADOs and monitor order fulfillment. Vendor shall communicate in writing any issues or potential disruption in the shipment of an extended delivery order.

5.2.2.1 The ordering Agency guarantees acceptance of the total extended order amount, per the delivery dates designated on the ADO.

5.2.2.2 Upon acceptance of an extended delivery order, Vendor guarantees fulfillment of the order to its completion, per the delivery dates designated on the ADO.

5.3 Deliveries: Vendor shall deliver standard orders within 10 business days and emergency orders within two (2) business days after orders are received/accepted by Vendor, unless otherwise directed by the Agency. If the entire order cannot be delivered as indicated on the ADO, an initial delivery must be made by the date indicated on the ADO and arrangements for successive deliveries of the remaining amount must be made with the ordering Agency.

5.3.1 Vendor shall ship all orders in accordance with Sections 5 and 6 of these contract specifications and shall not hold orders until a minimum quantity is met.

5.3.2 Vendor shall provide a delivery/weight scale ticket with each shipment of material transported to an Agency delivery site. The delivery/weight scale ticket must be signed by the delivery driver and a copy must be provided for the ordering Agency at the time of delivery.

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5.3.2.1 Vendor shall provide a pick-up/weight scale ticket for material orders obtained directly from a Vendor's storage site by an Agency. The pick-up ticket must be signed by Vendor storage site personnel and a copy must be provided to the ordering Agency at the time of pick-up.

5.4 Purchase Guarantee: The WVDOH shall guarantee order fulfillment of 60% of the estimated quantity awarded statewide to Vendor. The purchase guarantee shall apply to the statewide total tonnage awarded to Vendor, not individual estimated totals per District, County, or Agency delivery site locations. For example, if a Vendor's statewide estimated quantity comes to 43,000 tons, the purchase guarantee amount shall be calculated as follows:

- 43,000 tons x 60% = 25,800 tons. The WVDOH guarantees a minimum purchase of 25,800 tons to be ordered throughout the term of the contract.

5.5 Supply Guarantee: Vendor shall guarantee the availability of 120% of its estimated statewide awarded quantity for WVDOH delivery and/or pick-up. The supply guarantee shall apply to the statewide total tonnage awarded to Vendor, not individual estimated totals per District, County, or Agency delivery site locations. For example, if a Vendor's statewide estimated quantity comes to 43,000 tons, the source guarantee amount shall be calculated as follows:

- 43,000 tons x 120% = 51,600 tons. Vendor shall guarantee the availability of 51,600 tons for WVDOH pick-up and/or delivery throughout the term of the contract.

5.5.1 Orders Beyond 120%: The Agency reserves the right to place orders that exceed a Vendor's 120% source guarantee. Orders placed in excess of a Vendor's 120% source guarantee shall be paid at a rate of 110% of the Vendor's awarded price. Placement of these orders and commencement of deliveries shall be in accordance with Sections 5 and 6 of these contract specifications.

5.6 Vendor Reports: Vendor shall provide reports to the WVDOH Operations Division upon request. Reports shall be submitted in a spreadsheet format and detail: order date, ADO purchase order (P.O.) number, tons ordered, and tons delivered/picked up for the requested period of time. Order data for delivery orders shall also detail the District/County delivery sites, as listed on ATT A. Order data for pick-up orders shall also identify the vendor storage site that material was obtained from. Failure to supply such reports may be grounds for cancellation of this Contract.

**REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride**

6. ORDER ACCEPTANCE, PAYMENT, AND FAILED DELIVERY:

6.1 Order Acceptance and Written Verification of Receipt: Upon receipt of a standard or extended delivery ADO, the Vendor shall advise the WVDOH in writing within five (5) calendar days of their acceptance or refusal of the ADO. As verification of receipt, Vendor must provide written acknowledgement of any ADOs and any revisions/modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any ADOs/revisions within five (5) days of a standard order being sent shall be considered refusal of the ADO. In the event of refusal, the WVDOH, at its own discretion, shall cancel the ADO and may seek to obtain the goods or services from the next low bid Vendor or proceed with an emergency purchase from the open market. The quantity of materials requested on the rejected ADO shall still be applied to the Agency's purchase guarantee amounts with that specific Vendor.

6.2 Payment: Upon completion of an order, as indicated on the ADO, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia's Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor's Office. The Vendor may visit the WV State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.

6.3 Failed Delivery and Risk of Loss: The Agency placing an order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party. The Agency placing the Delivery Order under this Contract must be notified in writing by the Vendor within 36 hours of acceptance of the Agency's Delivery Order. Any failure to notify, acknowledge receipt of WVDOH's written Delivery Orders/revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, shall result in WVDOH's cancellation of the Delivery Order and application of Liquidated Damages.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the Purchasing Division.

6.3.1 Liquidated Damages: If the vendor's delivery of goods/services or corrections thereto exceeds the Delivery Order completion due date or timeframe, the Vendor shall agree that no extension of contract time will be

**REQUEST FOR QUOTATION
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granted unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified Delivery Order due date and in accordance with this Section, the Contract's Terms and Conditions, Standard Specs Section 108.7, and the following Standard Specs Section Table 108.7.1 - Schedule of Liquidated Damages, as amended:

**Table 108.7.1
Schedule of Liquidated Damages**

Original Contract Amount		Daily Charges Per Calendar Day
For More Than	To and Including	
\$0	\$500,000	\$300
\$500,000	\$2,000,000	\$600
\$2,000,000	\$10,000,000	\$1,500
\$10,000,000	\$25,000,000	\$3,000
\$25,000,000		\$4,000

6.3.2 Force Majeure: It shall be further noted that the Vendor is not responsible for and shall not be penalized for delays in its delivery of goods and/or services when caused by factors or events outside Vendor's control, including but not limited to acts or omissions of the Agency or third parties, acts of civil or military authority, civil disturbance, war, terrorism, pandemics, explosions, fire, floods, tornadoes or other natural disasters, or acts of God.

7. VENDOR DEFAULT:

7.1 The following shall be considered a vendor default under this Contract.

- 7.1.1** Failure to provide Contract Items in accordance with the requirements contained herein.
- 7.1.2** Failure to comply with other specifications and requirements contained herein.
- 7.1.3** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
- 7.1.4** Failure to remedy deficient performance upon request.

**REQUEST FOR QUOTATION
Roadway Salt – Sodium Chloride**

7.2 The following remedies shall be available to Agency upon default.

7.2.1 Immediate cancellation of the Contract.

7.2.2 Immediate cancellation of one or more release orders issued under this Contract.

7.2.3 Any other remedies available in law or equity.

8. MISCELLANEOUS:

8.1 No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.

8.2 Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.

8.3 Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary Contract Manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract Manager and his or her contact information below.

Contract Manager: Jamie A. McClain

Telephone Number: (888) 762-7258

Fax Number: (585) 243-7676

Email Address: customerservice@americanrocksalt.com

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.



Designation: D632 – 12 (Reapproved 2020)^{ε1}



Standard Specification for Sodium Chloride¹

This standard is issued under the fixed designation D632; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

^{ε1} NOTE—10.1 was revised editorially in December 2020.

1. Scope

1.1 This specification covers sodium chloride intended for use as a deicer and for road construction or maintenance purposes.

1.2 The values stated as SI units are to be regarded as the standard.

1.3 For purposes of determining conformance to this specification, values for chemical analysis shall be rounded to the nearest 0.1 %, and values for grading shall be rounded to the nearest 1 %, in accordance with the rounding method in Practice E29.

1.4 The text of this specification references notes and footnotes that provide explanatory material. These notes and footnotes shall not be considered as requirements of the specification.

1.5 The following precautionary caveat pertains only to the test method in Annex A1 of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.31 on Calcium and Sodium Chlorides and Other Deicing Materials.

Current edition approved Nov. 1, 2020. Published November 2020. Originally approved in 1941. Last previous edition approved in 2012 as D632 – 12. DOI: 10.1520/D0632-12R20E01.

2. Referenced Documents

2.1 ASTM Standards:²

- C136/C136M Test Method for Sieve Analysis of Fine and Coarse Aggregates
- C670 Practice for Preparing Precision and Bias Statements for Test Methods for Construction Materials
- E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves
- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E287 Specification for Laboratory Glass Graduated Burets
- E288 Specification for Laboratory Glass Volumetric Flasks
- E534 Test Methods for Chemical Analysis of Sodium Chloride

3. Classification

3.1 This specification covers sodium chloride obtained from natural deposits (rock salt) or produced by man (evaporated, solar, other) and recognizes two types and two grades as follows:

3.1.1 *Type I*—Used primarily as a pavement deicer or in aggregate stabilization.


3.1.1.1 *Grade 1*—Standard grading (Note 1).

3.1.1.2 *Grade 2*—Special grading (Note 1).

3.1.2 *Type II*—Used in aggregate stabilization or for purposes other than deicing.

NOTE 1—Grade 1 provides a particle grading for general application, and has been found by latest research to be most effective for ice control and skid resistance under most conditions. Grade 2 is the grading typical of salt produced in the western United States and is available in states of the Rocky Mountains region and west, which may be preferred by purchasers in that area.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.


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4. Chemical Requirements

4.1 The sodium chloride shall conform to the following requirement for chemical composition, except for the tolerance stated in 6.1 and 6.2:

Sodium chloride (NaCl), min, % 95.0

5. Physical Requirements

5.1 Grading:

5.1.1 *Type I*—The grading of Type I sodium chloride, when tested by means of laboratory sieves conforming to Specification E11, shall conform to the following requirements for particle size distribution, except for the tolerance stated in 6.1 and 6.1.1:

Sieve Size	Mass % Passing	
	Grade 1	Grade 2
19.0 mm (¾ in.)	...	100
12.5 mm (½ in.)	100	...
9.5 mm (⅜ in.)	95 to 100	...
4.75 mm (No. 4)	20 to 90	20 to 100
2.36 mm (No. 8)	10 to 60	10 to 60
600 µm (No. 30)	0 to 15	0 to 15

5.1.2 *Type II*—The grading of Type II sodium chloride shall conform to the grading requirements imposed or permitted by the purchaser under conditions of the intended use.

6. Permissible Variations

6.1 In the case of sodium chloride sampled after delivery to the purchaser, tolerances from the foregoing specified values shall be allowed as follows:

6.1.1 *Grading*—Five percentage points on the maximum value for the range for each sieve size, except the 12.5 mm (½ in.) and 9.5 mm (⅜ in.) for Grade 1 and 19.0 mm (¾ in.) for Grade 2.

6.1.2 *Chemical Composition*—0.5 percentage point.

7. Condition

7.1 The sodium chloride shall arrive at the purchaser's delivery point in a free-flowing and usable condition.

8. Sampling

8.1 Not less than three sample increments shall be selected at random from the lot (Note 2). Each increment shall be obtained by scraping aside the top layer of material to a depth of at least 25 mm (1 in.) and taking a 500-g (approximately 1-lb) quantity of sodium chloride to a depth of at least 150 mm

(6 in.). Sampling shall be done by means of a sampling thief or other method that will ensure a representative cross section of the material. The sample increments shall be thoroughly mixed to constitute a composite sample representative of the lot.

NOTE 2—A lot may be an amount agreed upon between purchaser and supplier at the time of purchase.

9. Test Methods

9.1 *Chemical Analysis*—Test for compliance with the requirements for chemical composition in accordance with the following methods:

9.1.1 *Routine Control*—Use of the "Rapid Method" in Annex A1 is permitted for routine control and approval.

9.1.2 *Referee Testing*—In case of controversy, determine the chemical composition of the sample using the current version of Test Method E534.

9.2 Grading shall be determined by Test Method C136/C136M.

10. Inspection

10.1 The purchaser or purchaser's representative shall be provided free entry and necessary facilities at the production plant or storage area if the purchaser elects to sample sodium chloride at the source.

11. Rejection and Rehearing

11.1 The sodium chloride shall be subject to rejection if it fails to conform to any of the requirements of this specification.


11.2 In the case of failure to meet the requirements on the basis of an initial sample of a lot represented, two additional samples shall be taken from the lot and tested. If both additional samples meet the requirements, the lot shall be accepted.

12. Packaging and Marking

12.1 The sodium chloride shall be delivered in bags or other containers acceptable to the purchaser, or in bulk lots. The name of the producer and the net weight shall be legibly marked on each bag or container, or in the case of bulk lots, on the shipping or delivery report.

13. Keywords

13.1 salt; snow and ice removal; sodium chloride; stabilization; winter maintenance


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ANNEX**(Mandatory Information)****A1. RAPID METHOD OF ANALYSIS FOR SODIUM CHLORIDE****A1.1 Scope**

A1.1.1 This annex covers a rapid method for chemical analysis of sodium chloride.

A1.1.2 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

A1.2 Significance and Use

A1.2.1 The procedure for chemical analysis in this annex determines the total amount of chlorides present in the sample and expresses that value as sodium chloride.

A1.2.2 This rapid method of analysis does not distinguish between sodium chloride and other evaporite chloride compounds with ice-melting capabilities. Typical rock salt and solar salt sometimes contains small amounts of CaCl_2 , MgCl_2 , and KCl , depending on the source of the material. When this rapid method is used on continuing shipments from a known source, it will provide a fast, essentially accurate determination of the sodium chloride content of the material furnished. Thus, the need for testing by the referee method, Test Method E534, is reduced.

A1.3 Apparatus

A1.3.1 *Glassware*—Standard weighing bottles, volumetric flasks (conforming to Specification E288, Class C or better), and burets (conforming to Specification E287, Class B or better).

A1.3.2 *Balance*, having a capacity of at least 20 g, accurate and readable to 0.01 g.

A1.4 Reagents

A1.4.1 *Nitric Acid (HNO_3)*, dilute ($\text{HNO}_3:\text{H}_2\text{O}$, 1:4 by volume).

A1.4.2 *Calcium Carbonate (CaCO_3)*—Reagent grade, low chloride, powder.

A1.4.3 *Silver Nitrate Solution*—0.05 N AgNO_3 .

A1.4.4 *Sodium Chloride (NaCl)*—Reagent grade.

A1.4.5 *Potassium Chromate (K_2CrO_4) Solution*—(50 g $\text{K}_2\text{CrO}_4/\text{L}$).

A1.5 Procedure

A1.5.1 Thoroughly mix the composite sample obtained under 8.1, and reduce by quartering or by means of a sample

splitter to approximately 500 g. Pulverize the reduced sample to pass a 300- μm (No. 50) sieve.

A1.5.2 *Standardization*—Standardize the silver nitrate (AgNO_3) solution daily, using 10 g of reagent grade sodium chloride (NaCl) following the applicable procedure in A1.5.3.

A1.5.3 From the pulverized sodium chloride, obtain a test sample with a mass of 10.00 ± 0.01 g and place in a beaker with 250 mL distilled water. Add 10 mL of the diluted nitric acid solution (HNO_3 , 1 + 4 by volume) and stir for 20 min at room temperature to put the salt in solution. Transfer the solution, including any insoluble material, to a 2-L volumetric flask, dilute to the mark with distilled water, and mix. With a pipet, draw off 25 mL of the solution and place in a white porcelain casserole. Add 0.5 g of calcium carbonate (CaCO_3) to neutralize the excess HNO_3 , and adjust the pH to approximately 7. Add 3 mL of the potassium chromate (K_2CrO_4) solution as an indicator and titrate dropwise with the silver nitrate (AgNO_3) solution until a faint but distinct change in color occurs—a persistent yellowish brown endpoint (see Note A1.1), comparable to standardization. Estimate the titer from the buret to the second decimal place.

NOTE A1.1—The color of the initial solution is lemon-yellow. With addition of the calcium carbonate (CaCO_3) and stirring, the initial solution becomes opaque, with a creamy lemon-yellow color. Addition of the silver nitrate (AgNO_3) solution produces silver chloride, which begins to agglomerate as the titration progresses, and the lemon-yellow color will begin to have whitish, opaque swirls of silver chloride. As the titration proceeds, the red color formed by addition of each drop begins to disappear more slowly. Continue the addition dropwise until a faint but distinct change in color occurs and the yellow-brown to faint reddish-brown color persists. The first stable presence of red silver chromate is the endpoint. If the endpoint is overstepped, a deep reddish-brown color occurs.

A1.6 Calculate—Calculate the total chlorides expressed as percent NaCl as follows:

$$P = [(A/B) \times (C/D)] \times 100 \quad (\text{A1.1})$$

where:

A = reagent grade NaCl used, g,


B = 0.05 N AgNO_3 solution required to titrate the reagent grade NaCl , mL,

C = 0.05 N AgNO_3 solution required to titrate the sample being tested, mL,

D = test sampling mass, g, and

P = total chlorides, expressed as sodium chloride, in the sample being tested, %.

A1.6.1 If moisture is apparent in the sample, dry a duplicate 10-g sample of the pulverized salt at 105 °C and correct the mass of the sample accordingly.


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A1.7 Precision and Bias

A1.7.1 Precision³—An interlaboratory study was conducted and an analysis was made that included three materials ranging from approximately 92 % to 99 % NaCl. Ten laboratories were included in the study.

A1.7.2 Single-Operator Precision (NaCl composition 95.0 % and greater)—The single-operator standard deviation of a single test result for average NaCl composition 95.0 % and greater has been found to be 0.248.⁴ Therefore, results of two properly conducted tests by the same operator on the same material with the same equipment and under the same conditions should not differ by more than 0.70 %.⁴

A1.7.3 Multilaboratory Precision (NaCl composition 95.0 % and greater)—The multilaboratory standard deviation of a single test result for average NaCl composition greater

than 95.0 % has been found to be 0.633 %.⁴ Therefore, results of two properly conducted tests in different laboratories on the same material should not differ by more than 1.79 %.⁴

A1.7.4 Single-Operator Precision (NaCl composition less than 95.0 % and greater than 90.0 %)—The single-operator coefficient of variation of a single test result for average NaCl composition less than 95.0 % and greater than 90.0 % has been found to be 0.427 %.⁴ Therefore, results of two properly conducted tests by the same operator on the same material with the same equipment and under the same conditions should not differ by more than 1.21 %.⁴

A1.7.5 Multilaboratory Precision (NaCl composition less than 95.0 % and greater than 90.0 %)—The multilaboratory standard deviation of a single test result for average NaCl composition less than 95.0 % and greater than 90.0 % has been found to be 0.711 %.⁴ Therefore, results of two properly conducted tests in different laboratories on the same material should not differ by more than 2.00 %.⁴

A1.7.6 Bias—No justifiable statement can be made on the bias of this test method because the data are not available.

³ Supporting data have been filed at ASTM International Headquarters and may be obtained by requesting Research Report RR:D04-1016. Contact ASTM Customer Service at service@astm.org.

⁴ These numbers represent, respectively, the (1s %) and (2s %) limits, as described in Practice C670.

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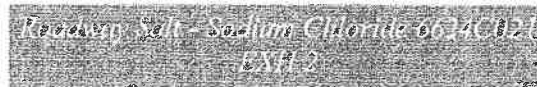
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This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.



Designation: E534 – 18



Standard Test Methods for Chemical Analysis of Sodium Chloride¹

This standard is issued under the fixed designation E534; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 These test methods cover the chemical analyses usually required for sodium chloride.

1.2 The analytical procedures appear in the following sections:

	Section
Sample Preparation	5 to 9
Moisture	10 to 17
Water Insolubles	18 to 26
Calcium and Magnesium	27 to 34
Sulfate	35 to 42
Reporting of Analyses	43 to 45

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 Review the current safety data sheets (SDS) for detailed information concerning toxicity, first-aid procedures, handling, and safety precautions.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

D1193 Specification for Reagent Water

D6809 Guide for Quality Control and Quality Assurance

¹ These test methods are under the jurisdiction of ASTM Committee D16 on Aromatic, Industrial, Specialty and Related Chemicals and are under the direct responsibility of Subcommittee D16.13 on Chlorine.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

Procedures for Aromatic Hydrocarbons and Related Materials

E180 Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial and Specialty Chemicals (Withdrawn 2009)³

E200 Practice for Preparation, Standardization, and Storage of Standard and Reagent Solutions for Chemical Analysis

3. Significance and Use

3.1 Sodium chloride occurs in nature. It is a necessary article of diet as well as the source for production of many sodium compounds and chlorine. The methods listed in 1.2 provide procedures for analyzing sodium chloride to determine if it is suitable for its intended use.

4. Reagents

4.1 *Purity of Reagents*—Unless otherwise indicated, it is intended that all reagents should conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available.⁴

4.2 *Purity of Water*—Unless otherwise indicated, references to water shall be understood to mean Type II or III reagent water conforming to Specification D1193.

SAMPLE PREPARATION

5. Scope

5.1 This test method covers preparation of a sample that will be as representative as possible of the entire bulk quantity. The results of any analysis pertain only to the sample used.

6. Apparatus

6.1 *Coarse Grinder.*

6.2 *High-Speed Blender.*

6.3 *Oven.*

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ *Reagent Chemicals. American Chemical Society Specifications*, American Chemical Society, Washington, DC. For suggestions on the testing of reagents not listed by the American Chemical Society, see *Analar Standards for Laboratory Chemicals*, BDH Ltd., Poole, Dorset, U.K., and the *United States Pharmacopeia and National Formulary*, U.S. Pharmacopeial Convention, Inc. (USPC), Rockville, MD.

*A Summary of Changes section appears at the end of this standard



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TABLE 1 Precision for Moisture Method

Level, %	Repeatability			Laboratory Precision			Reproducibility		
	Standard Deviation, %	Degrees of Freedom	95 % Limit, %	Standard Deviation, %	Degrees of Freedom	95 % Limit, %	Standard Deviation, %	Degrees of Freedom	95 % Limit, %
0.003 to 0.004	0.0014	36	0.004	0.00223	18	0.006	0.00322	8	0.009
0.025 to 0.035	0.0071	60	0.02	0.00428	30	0.01	0.0138	9	0.04

6.4 *Riffle Sampler.*

6.5 *Scale.*

7. Reagents

7.1 *Hydrochloric Acid, Standard (1 meq/mL HCl)*—Prepare and standardize in accordance with Practice E200.

8. Rock and Solar Salt Stock Solutions

8.1 Mix and split sample to 500 g, using the riffle sampler.

8.2 If sample appears wet, dry at 110°C for 2 h.

8.3 Grind the sample to -8 mesh in the coarse grinder.

8.4 Mix ground sample well and weigh out a 25.0-g representative portion for rock salt or 50.0 g for solar salt.

8.5 Place 200 mL of water in the high-speed blender and start at low speed.

8.6 Slowly add the salt sample to the high-speed blender and blend for 5 min.

8.7 Test for water insolubles as described in Sections 18 – 26.

8.8 Save filtrate from water insolubles test and dilute in a volumetric flask to 1 L with water as a stock solution for subsequent analyses.

9. Evaporated and Purified Salt Stock Solutions

9.1 Mix and split the sample to 100 g for evaporated salt, or 200 g for purified evaporated salt.

9.2 Transfer to a 1-L volumetric flask.

9.3 Add 800 mL of water and allow the salt to dissolve.

9.4 Add 2 mL of concentrated HCl to dissolve any water insoluble calcium salts, particularly calcium carbonate.

9.5 Dilute to volume with water and use as a stock solution for subsequent analyses.

MOISTURE

10. Scope

10.1 This test method determines free moisture in the salt over a concentration range from 0.00 to 0.04 %. It does not determine occluded moisture trapped within the salt crystals. The procedure is based on weight loss after a sample is heated to volatilize moisture.

11. Apparatus

11.1 *Analytical Balance* capable of weighing to ± 0.001 g.

11.2 *Desiccator.*

11.3 *Oven.*

12. Procedure, Rock and Solar Salt

12.1 Weigh 100 g of salt to the nearest 0.05 g into a previously dried and tared moisture dish.

12.2 Dry at 110°C for 2 h.

12.3 Cool in a desiccator and weigh.

13. Procedure, Evaporated and Purified Evaporated Salt

13.1 Weigh 20 g of salt to the nearest 0.001 g into a previously dried and weighed glass weighing bottle and cover.

13.2 Dry at 110°C for 2 h.

13.3 Cool in a desiccator, replace cover, and weigh.

14. Calculation

14.1 Calculate the percentage of moisture as follows:

$$\text{moisture, mass (m/m) \%} = \frac{A}{B} \times 100 \quad (1)$$

where:

A = loss of mass on drying, g, and

B = mass of sample, g.

15. Report

15.1 Report the moisture content to the nearest 0.001 %.

16. Precision and Bias⁵

16.1 Ten laboratories analyzed five samples in duplicate on two different days. Practice E180 was followed for the design and analysis of the data; the details are given in ASTM Research Report RR:E15-1052.

16.1.1 *Intermediate Precision, formerly called Repeatability (Single Analyst)*—The standard deviation for a single determination has been estimated to be the percent absolute values shown in Table 1 at the indicated degrees of freedom. The 95 % limit for the difference between two such runs is the percent absolute values in Table 1.

16.1.2 *Laboratory Precision (Within-Laboratory, Between-Days Variability)*—The standard deviation of results (each the average of duplicates), obtained by the same analyst on different days, has been estimated to be the percent absolute values shown in Table 1 at the indicated degrees of freedom. The 95 % limit for the difference between two such averages is the percent absolute values in Table 1.

⁵ Supporting data have been filed at ASTM International Headquarters and may be obtained by requesting Research Report RR:E15-1052. Contact ASTM Customer Service at service@astm.org.


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16.1.3 *Reproducibility (Multilaboratory)*—The standard deviation of results (each the average of duplicates), obtained by analysts in different laboratories, has been estimated to be percent absolute values shown in Table 1. The 95 % limit for the difference between two such averages is the percent absolute values in Table 1.

16.2 *Bias*—The bias of this test method has not been determined due to the unavailability of suitable reference materials.

17. Quality Guidelines

17.1 Laboratories shall have a quality control system in place.

17.1.1 Confirm the performance of the test instrument or test method by analyzing a quality control sample following the guidelines of standard statistical quality control practices.

17.1.2 A quality control sample is a stable material isolated from the production process and representative of the sample being analyzed.

17.1.3 When QA/QC protocols are already established in the testing facility, these protocols are acceptable when they confirm the validity of test results.

17.1.4 When there are no QA/QC protocols established in the testing facility, use the guidelines described in Guide D6809 or similar statistical quality control practices.

WATER INSOLUBLES

18. Scope

18.1 This gravimetric method determines only the amount of insolubles present in sodium chloride which will not dissolve in water.

19. Apparatus

19.1 *Analytical Balance.*

19.2 *Desiccator.*

19.3 *Magnetic Stirrer with Stirring Bar.*

19.4 *Parabella Filter Funnel Assembly*, 1000-mL, or its equivalent with 0.3- μ m glass fiber filter disk.

20. Reagents

20.1 *Silver Nitrate, Standard Solution*, 0.1 meq/mL AgNO_3 —Prepare and standardize in accordance with Practice E200.

21. Procedure, Rock and Solar Salts

21.1 Transfer a sample prepared in accordance with 8.1 to 8.6 to a 1-L Erlenmeyer flask, washing out the blender with 100 mL of water. Add 300 mL of water to give a total of 600 mL of water added.

21.2 Stir on a magnetic stirrer for 1 h. Adjust the stirrer speed to give maximum agitation without danger of losing any sample due to splashing. Place a beaker or watch glass over top of the flask while stirring.

21.3 Filter the solution by vacuum through a previously dried (110°C for 1 h) and accurately weighed filter disk using

the Parabella funnel. Transfer all insolubles to the paper and wash free of chlorides with water until the filtrate shows no turbidity when tested with 0.1 meq/mL AgNO_3 solution.

21.4 Dilute filtrate and washings to 1 L with water in volumetric flask.

21.5 Dry the filter disk at 110°C for 1 h.

21.6 Cool in a desiccator and weigh the disk on an analytical balance.

21.7 Save the filtrate for subsequent analyses.

22. Procedure, Evaporated and Purified Evaporated Salts

22.1 Place a well mixed sample in a 2-L beaker. Use 100-g sample for evaporated or 200 g for purified evaporated salt.

22.2 Add 750 mL of water.

22.3 Mix with a mechanical stirrer until solution is complete.

22.4 Filter the solution by vacuum through a previously dried (110°C for 1 h) and accurately weighed filter disk using the Parabella funnel. Transfer all insolubles to the paper and wash free of chlorides with water until the filtrate shows no turbidity when tested with 0.1 meq/mL AgNO_3 solution.

22.5 Dry the filter disk at 110°C for 1 h.

22.6 Cool in a desiccator and weigh on an analytical balance.

22.7 Dilute the filtration and washings to 1 L with water in a volumetric flask and reserve for subsequent analyses.

23. Calculation

23.1 Calculate the percentage of water insolubles as follows:

$$\text{insolubles, \% mass (m/m)} = \frac{A}{B} \times 100 \quad (2)$$

where:

A = increase in mass of filter disk, g, and

B = sample mass, g.

24. Report

24.1 Report the percentage of water insolubles to the nearest percentage shown as follows:

Range, %	Report to, %
0.002 to 0.005	0.001
0.01 to 0.04	0.01
0.15 to 0.35	0.01

25. Precision and Bias⁵

25.1 Ten laboratories analyzed six samples in duplicate on two different days. Practice E180 was followed for the design and analysis of the data; the details are given in ASTM Research Report RR:E15-1052.

25.1.1 *Intermediate Precision, formerly called Repeatability (Single Analyst)*—The coefficient of variation for a single determination has been estimated to be the percent relative values shown in Table 2 at the indicated degrees of freedom. The 95 % limit for the difference between two such runs is percent relative values shown in Table 2.



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TABLE 2 Precision for Water Insolubles Method

Level, %	Repeatability			Reproducibility		
	Coefficient of Variation, % relative	Degrees of Freedom	95 % Limit, % relative	Coefficient of Variation, % Relative	Degrees of Freedom	95 % Limit, % relative
0.002 to 0.005	22.0	20	62	91.7	9	257
0.01 to 0.04	21.9	18	61	42.2	8	118
0.15 to 0.35	22.0	20	62	20.5	9	57

25.1.2 *Laboratory Precision (Within-Laboratory, Between-Days Variability)*—The coefficient of variation of results (each the average of duplicates), obtained by the same analyst on different days, has been estimated to be 23.5 % relative at 57 df. The 95 % limit for the difference between two such averages is 66 % relative.

25.1.3 *Reproducibility (Multilaboratory)*—The coefficient of variation of results (each the average of duplicates), obtained by analysts in different laboratories, has been estimated to be percent relative values shown in Table 2 at the indicated degrees of freedom. The 95 % limit for the difference between two such averages is percent relative values shown in Table 2.

25.2 *Bias*—The bias of this test method has not been determined due to the unavailability of suitable reference materials.

26. Quality Guidelines

26.1 Laboratories shall have a quality control system in place.

26.1.1 Confirm the performance of the test instrument or test method by analyzing a quality control sample following the guidelines of standard statistical quality control practices.

26.1.2 A quality control sample is a stable material isolated from the production process and representative of the sample being analyzed.

26.1.3 When QA/QC protocols are already established in the testing facility, these protocols are acceptable when they confirm the validity of test results.

26.1.4 When there are no QA/QC protocols established in the testing facility, use the guidelines described in Guide D6809 or similar statistical quality control practices.

CALCIUM AND MAGNESIUM

27. Scope

27.1 This test method covers the EDTA titrimetric determination of calcium and magnesium and the EDTA titrimetric determination of calcium. The magnesium content is determined by difference.

28. Apparatus

28.1 *Magnetic Stirrer with Stirring Bar.*

29. Reagents

29.1 *Eriochrome Black T Indicator Solution, Hydroxy Naphthol Blue,* or its equivalent.

29.2 *Murexide (Ammonium Purpurate) Indicator Solution,* or its equivalent.

29.3 *EDTA Standard Solution (1 mL = 0.400 mg calcium)*—Dissolve 4.0 g of disodium dihydrogen ethylene diaminetetraacetate (EDTA) in 1 L of water. Standardize this solution against a standard calcium solution prepared by dissolving 1.000 g of CaCO₃ and 2 mL of HCl in water and diluting to 1 L with water in a volumetric flask. Obtain an exact factor for the EDTA solution. This factor is equal to the milligrams of calcium equivalent to 1.00 mL of EDTA solution. See Practice E200.

$$\text{factor} = \frac{W}{V} \quad (3)$$

where:

W = calcium in aliquot, mg, and

V = EDTA solution required for titration, mL.

29.4 *Ammonium Chloride–Ammonium Hydroxide Solution*—Add 67.5 g of ammonium chloride (NH₄Cl) to 570 mL of ammonium hydroxide (NH₄OH) contained in a 1-L volumetric flask. Reserve this solution for use as described in 29.6 and 29.7.

29.5 *Potassium Cyanide Solution (50 g/L)*—Dissolve 50 g of potassium cyanide (KCN) in water and dilute to 1 L with water. Store in a borosilicate glass bottle. (**Warning**—Potassium cyanide is extremely poisonous.)

29.6 *Magnesium Sulfate Solution (2.5 g/L)*—Dissolve 2.5 g of MgSO₄·7H₂O in water and dilute to volume with water in a 1-L volumetric flask. Determine the volume of EDTA solution equivalent to 50 mL of MgSO₄ solution as follows: Pipet 50 mL of MgSO₄ solution into a 400-mL beaker. Add 200 mL of water and 2 mL of NH₄Cl:NH₄OH solution (27.4). Add 1 mL of KCN solution and a sufficient amount of Eriochrome Black T Indicator solution or its equivalent. Titrate the solution with EDTA solution while stirring with a magnetic stirrer to the true blue end point. This gives the volume of EDTA solution equivalent to 50.0 mL of MgSO₄ solution.

29.7 *Buffer Solution*—Pipet 50 mL of MgSO₄ solution into the volumetric flask containing the remaining NH₄Cl:NH₄OH solution (27.4). Add the exact volume of EDTA solution equivalent to 50 mL of the MgSO₄ solution. Dilute to 1 L with water. Store the solution in a polyethylene bottle.

29.8 *Potassium Hydroxide Solution (600 g/L)*—Dissolve 150 g of potassium hydroxide (KOH) in 250 mL of water. Cool and store in a polyethylene bottle.

30. Procedure

30.1 Using Table 3 as a guide, pipet two aliquots of stock solution into 400-mL beakers to give a titer between 2 and 10



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TABLE 3 Stock Solutions (Calcium and Magnesium)

Stock Solution	Aliquot, mL
Kansas rock salt	10
Northern rock salt	25
Southern rock salt	50
Evaporated salt	50
Purified salt	200
Solar salt	100

mL of standard EDTA solution. One aliquot is used to determine total calcium and magnesium and the other for calcium.

30.2 Dilute to 200 mL with water, if necessary, and place on magnetic stirrer.

30.3 Total Calcium and Magnesium:

30.3.1 Add 5 mL of buffer solution, 1 mL of KCN solution, and a sufficient amount of Eriochrome Black T Indicator Solution or its equivalent.

30.3.2 Titrate with standard EDTA solution to a true blue color.

30.3.3 Record the millilitres used as Titration 1 (T_1).

30.4 Calcium Only:

30.4.1 Add 2 mL of KOH solution, 1 mL of KCN solution to the other aliquot in 30.1 and 30.2, and stir for about 2 min to precipitate magnesium.

30.4.2 Add a sufficient amount of murexide solution or an equivalent calcium indicator solution.

30.4.3 Titrate with standard EDTA solution to a true blue color.

30.4.4 Record the millilitres used as Titration 2 (T_2).

31. Calculation

31.1 Calculate the mass percent of calcium as follows:

$$\text{Ca, \% mass (m/m)} = \frac{(T_2) (\text{factor}) (0.1)}{S} \quad (4)$$

where:

T_2 = EDTA used to titrate calcium only, mL.

S = mass of salt in aliquot, g.

31.1.1 See 29.3 for factor.

31.2 Calculate the mass percent of magnesium as follows:

$$\text{Mg, \% mass (m/m)} = \frac{(T_1 - T_2) (\text{factor}) (0.6064) (0.1)}{S} \quad (5)$$

where:

T_1 = EDTA used to titrate total calcium and magnesium,

S = mass of salt in aliquot, g.

32. Report

32.1 Report the percentage of calcium to the nearest 0.001 %. Report the percentage of magnesium to the nearest 0.001 %.

33. Precision and Bias⁵

33.1 Eight laboratories analyzed five samples in duplicate on two different days. Practice E180 was followed for the design and analysis of the data; the details are given in ASTM Research Report RR:E15-1052.

33.1.1 *Intermediate Precision, formerly called Repeatability (Single Analyst)*—The coefficient of variation for a single determination has been estimated to be 3.56 % relative at 100 df. The 95 % limit for the difference between two such runs is 10 % relative.

33.1.2 *Laboratory Precision (Within-Laboratory, Between-Days Variability)*—The coefficient of variation of results (each the average of duplicates), obtained by the same analyst on different days, has been estimated to be 6.34 % relative at 40 df. The 95 % limit for the difference between two such averages is 18 % relative.

33.1.3 *Reproducibility (Multilaboratory)*—The coefficient of variation of results (each the average of duplicates), obtained by analysts in different laboratories, has been estimated to be 9.82 % relative at 7 df. The 95 % limit for the difference between two such averages is 28 % relative.

33.1.4 *Bias*—The bias of this test method has not been determined due to the unavailability of suitable reference materials.

33.2 The following criteria should be used in judging the acceptability of magnesium results:

33.2.1 *Repeatability (Single Analyst)*—The standard deviation for a single determination has been estimated to be percent absolute values shown in Table 4 at the indicated degrees of freedom. The 95 % limit for the difference between two such runs is the percent absolute values shown in Table 4.

33.2.2 *Laboratory Precision (Within-Laboratory, Between-Days Variability)*—The standard deviation of results (each the average of duplicates), obtained by the same analyst on different days, has been estimated to be the percent absolute values shown in Table 4 at the indicated degrees of freedom. The 95 % limit for the difference between two such averages is the percent absolute values shown in Table 4.

33.2.3 *Reproducibility (Multilaboratory)*—The standard deviation of results (each the average of duplicates), obtained by analysts in different laboratories, has been estimated to be the percent absolute values shown in Table 4 at the indicated

TABLE 4 Precision for Magnesium Method

Range, %	Standard Deviation, %	Repeatability		Laboratory Precision			Reproducibility		
		Degrees of Freedom	95 % Limit, %	Standard Deviation, %	Degrees of Freedom	95 % Limit, %	Standard Deviation, %	Degrees of Freedom	95 % Limit, %
0.001 to 0.003	0.00071	56	0.002	0.00066	28	0.002	0.00147	8	0.004
0.02 to 0.025	0.0035	52	0.010	0.033	26	0.092	0.0042	8	0.012



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TABLE 5 Stock Solutions (Sulfate)

Stock Solution	Aliquot, mL
Rock salt	40
Evaporated salt	100
Purified evaporated salt	200
Solar salt	100

degrees of freedom. The 95 % limit for the difference between two such averages is the percent absolute values shown in Table 4.

33.2.4 *Bias*—The bias of this test method has not been determined due to the unavailability of suitable reference materials.

34. Quality Guidelines

34.1 Laboratories shall have a quality control system in place.

34.1.1 Confirm the performance of the test instrument or test method by analyzing a quality control sample following the guidelines of standard statistical quality control practices.

34.1.2 A quality control sample is a stable material isolated from the production process and representative of the sample being analyzed.

34.1.3 When QA/QC protocols are already established in the testing facility, these protocols are acceptable when they confirm the validity of test results.

34.1.4 When there are no QA/QC protocols established in the testing facility, use the guidelines described in Guide D6809 or similar statistical quality control practices.

SULFATE

35. Scope

35.1 This test method covers the gravimetric determination of the sulfate content of sodium chloride.

36. Apparatus

36.1 *Gooch Asbestos Slurry.*

36.2 *Gooch Filtering Crucible and Holder.*

36.3 *Muffle Furnace.*

36.4 *Oven.*

37. Reagents

37.1 *Barium Chloride Solution* (120 g BaCl₂ · 2H₂O/L)—Dissolve 120 g of barium chloride dihydrate in about 750 mL of water, filter, and dilute to 1 L.⁶

37.2 *Hydrochloric Acid Standard Solution* (1 meq/mL HCl)—Prepare and standardize in accordance with Practice E200.

37.3 *Methyl Orange Indicator Solution* (1 g/L)—Dissolve 0.1 g of methyl orange in 100 mL of water and filter if necessary.⁶

⁶ This reagent is also described in Practice E200.

38. Procedure

38.1 Using Table 5 as a guide, pipet the recommended aliquot of stock solution into a 400-mL beaker.

38.2 Dilute to 200 mL, add a few drops of methyl orange indicator solution and acidify with 1 mL of HCl (1 + 1) if necessary.

38.3 Heat solution gently to boiling and add 10 mL of BaCl₂ solution dropwise while stirring.

38.4 Digest on a hot plate below the boiling point for 30 min.

38.5 Cool overnight.

38.6 Filter through a tared Gooch crucible previously prepared with an asbestos mat and ignited in a muffle furnace at 800°C for 30 min. Transfer all the precipitate to the crucible with a rubber policeman. Wash with portions of hot water until washings are free of chlorides.

38.7 Dry the crucible at 110°C for 15 min, then ignite in a muffle furnace at 800°C for 30 min.

38.8 Cool in a desiccator and reweigh.

39. Calculation

39.1 Calculate percentage of sulfate as follows:

$$\text{sulfate, \% mass (m/m)} = \frac{A}{B} \times 0.4115 \times 100 \quad (6)$$

where:

A = mass of precipitate, g, and

B = mass of salt in aliquot, g.

40. Report

40.1 Report the percentage of sulfate to the nearest 0.001 %.

41. Precision and Bias⁵

41.1 Ten laboratories analyzed six samples in duplicate on two different days. Practice E180 was followed for the design and analysis of the data; the details are given in ASTM Research Report RR:E15-1052.

41.1.1 *Intermediate Precision formerly called Repeatability (Single Analyst)*—The coefficient of variation for a single determination has been estimated to be 7.14 % relative at 120 df. The 95 % limit for the difference between two such runs is 20 % relative.

41.1.2 *Laboratory Precision (Within-Laboratory, Between-Days Variability)*—The coefficient of variation of results (each the average of duplicates), obtained by the same analyst on different days, has been estimated to be 8.03 % relative at 60 df. The 95 % limit for the difference between two such averages is 22 % relative.

41.1.3 *Reproducibility (Multilaboratory)*—The coefficient of variation of results (each the average of duplicates), obtained by the same analyst in different laboratories, has been estimated to be 8.01 % relative at 9 df. The 95 % limit for the difference between two such averages is 22 % relative.

41.1.4 *Bias*—The bias of this test method has not been determined due to the unavailability of suitable reference materials.



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42. Quality Guidelines

42.1 Laboratories shall have a quality control system in place.

42.1.1 Confirm the performance of the test instrument or test method by analyzing a quality control sample following the guidelines of standard statistical quality control practices.

42.1.2 A quality control sample is a stable material isolated from the production process and representative of the sample being analyzed.

42.1.3 When QA/QC protocols are already established in the testing facility, these protocols are acceptable when they confirm the validity of test results.

42.1.4 When there are no QA/QC protocols established in the testing facility, use the guidelines described in Guide D6809 or similar statistical quality control practices.

REPORTING OF ANALYSES

43. Scope

43.1 Analyses should be reported on a dry basis. If analyses are on an as received sample, correction should be made by converting to a dry basis. Sodium chloride purity is determined by subtracting the total percentage of impurities from 100. Moisture should be reported as a separate value.

44. Procedure

44.1 Convert sulfate to calcium sulfate and the unused calcium to calcium chloride unless the sulfate in sample exceeds the quantity necessary to combine with the calcium. In this case, convert the calcium to calcium sulfate and the unused

sulfate first to magnesium sulfate, and the remaining sulfate, if any, to sodium sulfate. Convert the unused magnesium to magnesium chloride.

44.2 Report rock and solar salt impurities to the second decimal place and salt purity, by difference, to the first decimal place.

44.3 Report evaporated salt impurities to the third decimal place and salt purity, by difference, to the second decimal place.

44.4 Report purified salt impurities to the fourth decimal place and salt purity, by difference, to the third decimal place.

45. Conversion Factors

BaSO ₄	x	0.4116	=	SO ₄
BaSO ₄	x	0.5832	=	CaSO ₄
BaSO ₄	x	0.6086	=	Na ₂ SO ₄
Ca	x	3.3967	=	CaSO ₄
Ca	x	0.6064	=	Mg
CaSO ₄	x	0.2944	=	Ca
CaSO ₄	x	0.8153	=	CaCl ₂
CaSO ₄	x	0.8842	=	MgSO ₄
CaSO ₄	x	1.0434	=	Na ₂ SO ₄
Mg	x	3.9173	=	MgCl ₂
MgCl ₂	x	1.4296	=	CaSO ₄
MgCl ₂	x	1.2641	=	MgSO ₄
MgSO ₄	x	1.4299	=	CaSO ₄
MgSO ₄	x	1.1311	=	MgCl ₂
MgSO ₄	x	1.1800	=	Na ₂ SO ₄
SO ₄	x	1.4173	=	CaSO ₄

46. Keywords

46.1 calcium; evaporated salt; magnesium; moisture; purified salt; rock salt; sodium chloride; sulfate; water insolubles

SUMMARY OF CHANGES

Committee D16 has identified the location of selected changes to this standard since the last issue (E534-13) that may impact the use of this standard. (Approved February 1, 2018.)

(1) Quality Guidelines were added to Section 17, Section 26, Section 34, and Section 42.

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 1

										<i>Delivery Location</i>
County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Location Details / Notes
Boone	Clinton @ WV85	108 Cow Creek Road Wharton, WV 25208	203 DOH Garage Road Danville, WV 25053	Michael Stowers	304-369-7808	michael.stowers@wv.gov	0103	-81.67344	37.89133	
	Rock Creek	203 DOH Garage Road Danville, WV 25053	203 DOH Garage Road Danville, WV 25053	Michael Stowers	304-369-7808	michael.stowers@wv.gov	0103	-81.843373	38.102447	
	Seth	9288 Coal River Road Seth, WV 25181	203 DOH Garage Road Danville, WV 25053	Michael Stowers	304-369-7808	michael.stowers@wv.gov	0103	-81.618629	38.118449	
Clay	Marsel	Next to: 2054 Precious Maysel Rd Marsel, WV 25133	4476 Triplett Ridge Road Clay, WV 25043	Terry Legg	304-587-4241	terry.legg@wv.gov	0108	-81.117424	38.486493	
	Widen Road & CR 11	4476 Triplett Ridge Road Clay, WV 25043	4476 Triplett Ridge Road Clay, WV 25043	Terry Legg	304-587-4241	terry.legg@wv.gov	0108	-81.010867	38.486246	
Kanawha	Chelan	14987 MacCorkle Avenue Cabin Creek, WV 25035	1340 Smith Street Charleston, WV 25301	Quincy (J.R.) Barker	304-595-1313	quincy.j.barker@wv.gov	0123	-81.497033	38.19629	
	Corridor G @ Alum Creek	401 Champion Drive South Charleston, WV 25309	401 Champion Drive South Charleston, WV 25309	Jackie Blankenship	304-756-3634	jackie.j.blankenship@wv.gov	0182	-81.78225	38.277597	
	Elkview	115 Frame Road Elkview, WV 25071	115 Frame Road Elkview, WV 25071	Brian Greer	304-965-2860	brian.greer@wv.gov	0122	-81.481982	38.446712	
	I-64 @ Rt. 119 and Penn. Ave.	2266 Pennsylvania Avenue Charleston, WV 25302	2266 Pennsylvania Avenue Charleston, WV 25302	Robert Blacklock	304-342-2520	Robert.D.Blacklock@wv.gov	0172	-81.607311	38.370262	
	I-77 @ Sissonville	36 Allen Fork Road Sissonville, WV 25320	36 Allen Fork Road Sissonville, WV 25320	Mike Danley	304-988-3241	michael.d.danley@wv.gov	0173	-81.635435	38.56279	
	I-79 @ Amma	3134 Amma Road Amma, WV 25005	3134 Amma Road Amma, WV 25005	Ed Doems	304-565-9801	charles.doems@wv.gov	0174	-81.272707	38.569686	
	North Charleston	2800 W. Washington Charleston, WV 25387	2800 W. Washington Charleston, WV 25387	John Martin	304-744-3050	john.d.martin@wv.gov	0121	-81.678822	38.377941	
St. Albans	2334 MacCorkle Avenue St Albans, WV 25177	2334 MacCorkle Avenue St Albans, WV 25177	Stephen Harmon	304-722-0600	stephen.s.harmon@wv.gov	0124	-81.806165	38.385269		
Mason	Glenwood	Next to: 40210 Huntington Rd, (WV2) Glenwood, WV 25520	225 Fairground Road Point Pleasant, WV 25550	Clarence Pruitt	304-675-0853	Clarence.J.Pruitt@wv.gov	0127	-82.203569	38.588011	
	Pt. Pleasant @ Fairground Rd.	225 Fairground Road Point Pleasant, WV 25550	225 Fairground Road Point Pleasant, WV 25550	Clarence Pruitt	304-675-0853	Clarence.J.Pruitt@wv.gov	0127	-82.08445	38.919207	
	Pt. Pleasant @ Jackson Ave	2702 Jackson Avenue Point Pleasant, WV 25550	2702 Jackson Avenue Point Pleasant, WV 25550	Raine Beller	304-759-0713	raime.e.beller@wv.gov	0164	-82.123942	38.871796	
Hurricane @ Rt. 34	3256 Teays Valley Road Hurricane, WV 25526	3256 Teays Valley Road Hurricane, WV 25526	Jesse Miller	304-586-2023	jesse.d.miller@wv.gov	0140	-82.010375	38.435133		
I-64 @ Scary Creek	704 Winfield Road St. Albans, WV 25177	704 Winfield Road St. Albans, WV 25177	Kenny Nelson	304-759-0713	kenneth.nelson@wv.gov	0140	-81.850927	38.438286		
Red House	11923 Charleston Rd (WV62) Red House, WV 25168	3526 Teays Valley Road Hurricane, WV 25526	Jesse Miller	304-586-2023	jesse.d.miller@wv.gov	0140	-81.88298	38.545751		

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P059

ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION

DISTRICT 2

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location	Location Details / Notes
Cabell	Barboursville / Cabell County Headquarters	6200 Route 60 East Barboursville, WV 25504	P.O. Box 880 Huntington, WV 25712	Candis Adkins	304-736-3111	candis.d.adkins@wv.gov	0206	-82.266870	38.410300		
				Tony Edmonds	304-736-3111	tony.s.edmonds@wv.gov					
	Huntington I-64 Section 1	3100 16th Street Road Huntington, WV 25704	P.O. Box 880 Huntington, WV 25712	Jerry Pullen	304-528-5669	jerry.l.pullen@wv.gov	0271	-82.400610	38.391900		
				Kevin Manns	304-528-5669	kevin.r.manns@wv.gov					
	Huntington 17th St. Bridge	1637 Jefferson Street Huntington, WV 25704	P.O. Box 880 Huntington, WV 25712	Jerry Pullen	304-528-5669	jerry.l.pullen@wv.gov	0271	-82.482793	38.409345		
				Kevin Manns	304-528-5669	kevin.r.manns@wv.gov					
	Huntington 31st Bridge	3200 5th Avenue Huntington, WV 25702	P.O. Box 880 Huntington, WV 25712	Candis Adkins	304-736-3111	candis.d.adkins@wv.gov	0206	-82.390793	38.428182		
				Tony Edmonds	304-736-3111	tony.s.edmonds@wv.gov					
Lincoln	West Hamlin / Lincoln County Headquarters	7338 State Route 10 West Hamlin, WV 25571	P.O. Box 880 Huntington, WV 25712	Cynthia Lucas	304-824-3434	cynthia.d.lucas@wv.gov	0222	-82.197600	38.275050		
				Linda Adkins	304-824-3434	linda.e.adkins@wv.gov					
	Yawkey Substation	WV State Route 3 Yawkey, WV 25573	P.O. Box 880 Huntington, WV 25712	Cynthia Lucas	304-824-3434	cynthia.d.lucas@wv.gov	0222	-81.958010	38.221810		
				Linda Adkins	304-824-3434	linda.e.adkins@wv.gov					
	Harts Substation	McClellan Highway Harts, WV 25524	P.O. Box 880 Huntington, WV 25712	Cynthia Lucas	304-824-3434	cynthia.d.lucas@wv.gov	0222	-82.139310	38.037990		
				Linda Adkins	304-824-3434	linda.e.adkins@wv.gov					
Logan	Corridor G Sect 2 @ Chapmanville	8100 Old Logan Road Chapmanville, WV 25508	P.O. Box 880 Huntington, WV 25712	Elizabeth Spry	304-792-7035	elizabeth.a.spry@wv.gov	0282	-82.006580	37.935720		
				Larry Hubbard	304-792-7035	larry.e.hubbard@wv.gov					
	Wilkinson Substation	127 Springfield Road Wilkinson, WV 25653	P.O. Box 880 Huntington, WV 25712	Elizabeth Spry	304-792-7035	elizabeth.a.spry@wv.gov	0223	-81.997070	37.826390		
				Larry Hubbard	304-792-7035	larry.e.hubbard@wv.gov					
	Man Substation	4801 Buffalo Creek Road Amherstdale, WV 25607	P.O. Box 880 Huntington, WV 25712	Elizabeth Spry	304-792-7035	elizabeth.a.spry@wv.gov	0223	-81.811310	37.785550		
				Larry Hubbard	304-792-7035	larry.e.hubbard@wv.gov					
	Hickory Lane	#1 Hickory Lane Stollings, WV 25646	P.O. Box 880 Huntington, WV 25712	Elizabeth Spry	304-792-7035	elizabeth.a.spry@wv.gov	0223	-81.963273	37.821282		
				Larry Hubbard	304-792-7035	larry.e.hubbard@wv.gov					
Mingo	Corridor G @ Miller's Creek	1 Highway Garage Road Williamson, WV 25661	P.O. Box 880 Huntington, WV 25712	Tristan Spaulding	304-235-6003	tristan.a.spaulding@wv.gov	0281	-82.298060	37.768890		
				Justin Pinson	304-235-6060	justin.pinson@wv.gov					
	Mingo County Headquarters @ Miller's Creek Building #03025	1 Highway Garage Road Williamson, WV 25661	P.O. Box 880 Huntington, WV 25712	Tristan Spaulding	304-235-6003	tristan.a.spaulding@wv.gov	0230	-82.297990	37.768910		
				Justin Pinson	304-235-6060	justin.pinson@wv.gov					
	Gilbert Substation	US 52 Gilbert, WV 25621	P.O. Box 880 Huntington, WV 25712	Tristan Spaulding	304-235-6003	tristan.a.spaulding@wv.gov	0230	-81.903450	37.628760		
				Justin Pinson	304-235-6060	justin.pinson@wv.gov					
Mingo 119 South	US 119 - Mile 11 Williamson, WV 25661	P.O. Box 880 Huntington, WV 25712	Tristan Spaulding	304-235-6060	tristan.a.spaulding@wv.gov	0230	-82.259779	37.770469			
Wayne	Prichard Substation	1249 Prichard Road Prichard, WV 25555	P.O. Box 880 Huntington, WV 25712	Kimberly Conway	304-272-5127	kimberly.j.conway@wv.gov	0250	-82.591500	38.243420		
				Glenn Matthews	304-486-5010	glenn.a.mathews@wv.gov					
	Wayne County Headquarters	326 Third Street Wayne, WV 25571	P.O. Box 880 Huntington, WV 25712	Kimberly Conway	304-272-5127	kimberly.j.conway@wv.gov	0250	-82.442120	38.225840		
				Glenn Matthews	304-486-5010	glenn.a.mathews@wv.gov					
	Crum Substation	20351 Tolsia Highway Crum, WV 25669	P.O. Box 880 Huntington, WV 25712	Kimberly Conway	304-528-5681	kimberly.j.conway@wv.gov	0250	-82.428650	37.935770		
				Glenn Matthews	304-486-5010	glenn.a.mathews@wv.gov					
Heartland Intermodal Gateway	#1 Heartland Road Prichard, WV 25555	P.O. Box 880 Huntington, WV 25712	Kimberly Conway	304-528-5681	kimberly.j.conway@wv.gov	0250	-82.604702	38.224869			
				Glenn Matthews	304-486-5010	glenn.a.mathews@wv.gov					

ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 3

Delivery Location

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Location Details / Notes
Calhoun	Millstone / Calhoun County Headquarters	7619 S. Calhoun Highway Millstone, WV 25261	624 Depot Street Parkersburg, WV 26101	Chris Carter	304-420-4710	chris.l.carter@wv.gov	0307	-81.1087	38.83870	
Jackson	Ripley / Jackson County Headquarters	946 Claylick Road Ripley, WV 25271	624 Depot Street Parkersburg, WV 26101	Scott Whited	304-372-7857	scott.r.whited@wv.gov	0318	-81.7335	38.83290	
	I-77 - Medina Substation	2600 Medina Road Ravenswood, WV 26164	624 Depot Street Parkersburg, WV 26101	Dale Smith	304-420-4610	dale.s.smith@wv.gov	0372	-81.6274	38.99560	
Pleasants	Belmont / Pleasants County Headquarters	WV Route 2 Belmont, WV 26134	624 Depot Street Parkersburg, WV 26101	Amanda Nichols	304-420-4705	amanda.nichols@wv.gov	0337	-81.2637	39.38040	
Ritchie	APD Pennsboro	41 Ritchie Industrial Park Road Pennsboro, WV 26415	624 Depot Street Parkersburg, WV 26101	Joshua Cline	304-659-3027	joshua.c.cline@wv.gov	0382			
	Corridor D @ Nutter Farm	Nutter Farm @ US 50 Cairo, WV 26337	624 Depot Street Parkersburg, WV 26101	JoAnn Hardin	304-420-4703	joann.hardin@wv.gov	0383	-81.0226	39.27270	
	Ellenboro / Harrisville Substation	731 Ellenboro Road Harrisville, WV 26362	624 Depot Street Parkersburg, WV 26101	Melissa Flanigan	304-869-3331	Melissa.K.Flanigan@wv.gov	0343	-81.0448	39.24700	
	Greenwood	321 Long Run Rd Greenwood, WV 26415	321 Long Run Rd Greenwood, WV 26415	Melissa Flanigan	304-869-3331	Melissa.K.Flanigan@wv.gov	0343	-80.889547	39.27517	
	Smithville Substation	#18 Main Street Smithville, WV 26178	624 Depot Street Parkersburg, WV 26101	Melissa Flanigan	304-869-3331	Melissa.K.Flanigan@wv.gov	0343			
Roane	Left Hand @ WV 36	9734 Clay Road Left Hand, WV 25251	624 Depot Street Parkersburg, WV 26101	Maridith Parker	304-927-0962	Maridith.Parker@wv.gov	0344	-81.2376	38.62510	
	Ambler Ridge Substation @ US 119	US 119 @ Ambler Ridge Walton, WV 25286	624 Depot Street Parkersburg, WV 26101	Maridith Parker	304-927-0962	Maridith.Parker@wv.gov	0344	-81.3887	38.59600	
	Roane County Headquarters	269 Charleston Road Spencer, WV 25276	624 Depot Street Parkersburg, WV 26101	Maridith Parker	304-927-0962	Maridith.Parker@wv.gov	0344	-81.3584	38.78480	
Wirt	Elizabeth Substation	610 Schoolview Street Elizabeth, WV 26143	624 Depot Street Parkersburg, WV 26101	Chasity Stephens	304-420-4707	chasity.r.stephens@wv.gov	0343	-81.0448	39.24700	
Wood	Parkersburg @ Rt. 95S	905 Lubeck Avenue Parkersburg, WV 26101	624 Depot Street Parkersburg, WV 26101	Temmy McCauley	304-420-4700	temmy.m.mccauley@wv.gov	0371	-81.5032	39.23650	
	I-77 @ Parkersburg	1758 Mill Run Road Parkersburg, WV 26101	624 Depot Street Parkersburg, WV 26101	JoAnn Hardin	304-420-4703	joann.hardin@wv.gov	0371	-81.5032	39.23650	
	Corridor D @ Riverhill	253 @ River Hill Road Washington, WV 26181	624 Depot Street Parkersburg, WV 26101	JoAnn Hardin	304-420-4703	joann.hardin@wv.gov	0382			

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 4

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org	Long	Lat	Delivery Location	Location Details / Notes	
Doddridge	West Union	1993 Smithton Rd West Union, WV 26456	P. O. Box 4220 Clarksburg, WV 26302	Becky McCombs	304-627-2412	rebecca.m.mccombs@wv.gov	0409	-80.745100	39.297700			
				Tonya Gum	304-627-2412	tonya.l.gum@wv.gov						
Harrison	Harrison County Headquarters	119 Railcross Rd Clarksburg, WV 26301	P. O. Box 4220 Clarksburg, WV 26302	Darren Hutson	304-627-2140	darren.w.hutson@wv.gov	0417	-80.354000	39.309600		Old RT 50 in Smithburg	
	Saltwell	3833 Benedum Dr Bridgeport, WV 26330	P. O. Box 4220 Clarksburg, WV 26302	Chelsea McLe	304-627-2140	chelsea.r.mcle@wv.gov	0472	-80.221899	39.335847		US 19 North of Clarksburg	
				Kenny Welch	304-627-2411	kenny.j.welch@wv.gov						
	Lost Creek Substation	851 N. Streetcar Way Lost Creek, WV 26385	P. O. Box 4220 Clarksburg, WV 26302		Darren Bennett	304-627-2411	darren.l.bennett@wv.gov	0472	-80.343700	39.171700		I-79 Exit 125
					Kenny Welch	304-627-2411	kenny.j.welch@wv.gov					I-79 Exit 110
Tunnel Hill Substation	281 Tunnel Hill Rd Salem, WV 26426	P. O. Box 4220 Clarksburg, WV 26302		Jesse Sigley	304-782-3668	jesse.a.sigley@wv.gov	0482	-80.510400	39.292500		Junction of US 50 & CR 50/7	
Marion	Marion County Headquarters	916 Country Club Road Fairmont, WV 26554	P. O. Box 4220 Clarksburg, WV 26302	Laura Carney	304-367-2730	laura.m.carney@wv.gov	0425	-80.166600	39.468600		US 19 Spur West of Fairmont	
				Rodney McLe	304-367-2730	rodney.w.mcle@wv.gov						
Monongalia	Mannington Substation	1396 East Maint St Mannington, WV 26582	P. O. Box 4220 Clarksburg, WV 26302	Jim Villers	304-986-2600	james.e.villers@wv.gov	0425	-80.324400	39.519500			
	Goshen Road Substation	95 Goshen Rd Goshen Road, WV 26508	P. O. Box 4220 Clarksburg, WV 26302	Laura Carney	304-367-2730	laura.m.carney@wv.gov	0471	-79.990500	39.537800		US 250	
				Donald Bragg	304-285-3145	donald.j.bragg@wv.gov						I-79 Exit 146
	Monongalia County Headquarters	1510 Grafton Road Morgantown, WV 26508	P. O. Box 4220 Clarksburg, WV 26302		William Parnell	304-692-6364	william.h.parnell@wv.gov	0431	-79.943900	39.560500		US 119 South of Morgantown
					Michelle Carroll	304-285-3207	michelle.s.carroll@wv.gov					
Pentress Substation	5861 Mason Dixon HWY Pentress, WV 26544	P. O. Box 4220 Clarksburg, WV 26302		Elizabeth Gardner	304-285-3207	elizabeth.b.gardner@wv.gov	0431	-80.207200	39.719200		WV 7 West of Pentress	
Preston	Bruceton Mills Substation	14115 N. Preston HWY Bruceton Mills, WV 26525	P. O. Box 4220 Clarksburg, WV 26302	Michael J Pitek	304-879-5275	michael.j.pitek@wv.gov	0439	-79.641000	39.647200		WV 26 South of Bruceton Mills	
				Blain Bowmar	304-329-0192	blain.a.bowmar@wv.gov						
	Preston County Headquarters	1912 St. Joe Road Albright, WV 26519	P. O. Box 4220 Clarksburg, WV 26302		Margie Waybright	304-329-0192	margorie.a.waybright@wv.gov	0439	-79.632100	39.483900		CR 7/12 South of Albright
					Blain Bowmar	304-329-0192	blain.a.bowmar@wv.gov					
	Terra Alta Substation	3253 Veterans Memorial HWY Terra Alta, WV 26764	P. O. Box 4220 Clarksburg, WV 26302		Blain Bowmar	304-329-0192	blain.a.bowmar@wv.gov	0439	-79.514900	39.438300		WV 7 East of Terra Alta
					Margie Waybright	304-329-0192	margorie.a.waybright@wv.gov					
	Fellowsville Substation	2217 George Washington HWY Tunnelton, WV 26444	P. O. Box 4220 Clarksburg, WV 26302		Blain Bowmar	304-329-0192	blain.a.bowmar@wv.gov	0439	-79.812300	39.327300		US 50 East of Fellowsville
					Margie Waybright	304-329-0192	margorie.a.waybright@wv.gov					
Aurora Substation	2230 George Washington HWY Aurora, WV 26705	P. O. Box 4220 Clarksburg, WV 26302		Blain Bowmar	304-329-0192	blain.a.bowmar@wv.gov	0439	-79.568200	39.317000		US 50 West of Aurora	
				Margie Waybright	304-329-0192	margorie.a.waybright@wv.gov						
Cooper's Rock Substation	174 Casteel Rd Coopers Rock, WV 26525	P. O. Box 4220 Clarksburg, WV 26302		Tina Bragg	304-285-3206	tina.m.bragg@wv.gov	0473	-79.776830	39.659669		I-68 Exit 15	
				Richard Coddington	304-285-3206	richard.l.coddington@wv.gov						
Taylor	Taylor County Headquarters	1340 Trap Spring Rd Grafton, WV 26354	P. O. Box 4220 Clarksburg, WV 26302	Bob Petrel	304-265-6110	robert.d.petrel@wv.gov	0446	-80.065800	39.322100		US 250 East of Pruntytown	
				Lisa Miles	304-265-6110	lisa.l.miles@wv.gov						

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 5

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location
										Location Details / Notes
Berkeley	Martinsburg Headquarters - 0571 Storage Bldg	1867 Rock Cliff Drive Martinsburg, WV 25401	1867 Rock Cliff Drive Martinsburg, WV 25401	Paul Bohrer	304-267-0085	paull.bohrer@wv.gov	0571	-77.9667	39.49226	
	Tabler Station - 0502 Storage Bldg	1867 Rock Cliff Drive Martinsburg, WV 25401	1867 Rock Cliff Drive Martinsburg, WV 25401	Joe Castaldo	304-267-0060	joe.a.castaldo@wv.gov	0502	-78.02559	39.40807	
	Berkeley County Headquarters	Behind Park n Ride Exit 8 South Bound 25401	1867 Rock Cliff Drive Martinsburg, WV 25401	Joe Castaldo	304-267-0060	joe.a.castaldo@wv.gov	0502	-77.9667	39.49226	
Grant	Grant County Headquarters	H.C. 59, Box 245 (Route 28) Petersburg, WV 26847	H.C. 59, Box 245 Petersburg, WV 26847	Glenna Lott	304-257-4455	glenna.lott@wv.gov	0512	-79.17084	39.004214	
	Mt. Storm Substation	Corner of WV 42 & Route 50 Mt. Storm, WV 26739	H.C. 59, Box 245 Petersburg, WV 26847	Glenna Lott	304-257-4455	glenna.lott@wv.gov	0512	-79.24079	39.275529	
	Corridor H @ Knobloy Road	US Route 48 (off of Corridor H) Maysville, WV 26833	2104 State Route 55 Moorefield, WV 26836	Tammy Crites	304-434-2228	tammy.l.crites@wv.gov	0583	-79.13427	39.1527	
Hampshire	Hampshire County Headquarters	H. C. 64, Box 232 (Jersey Mtn. Road) Romney, WV 26757	H.C. 64, Box 232 Romney, WV 26847	Autumn Kiser	304-822-4167	autumn.d.kiser@wv.gov	0514	-78.71298	39.34021	
	Capon Bridge Substation	Route 50 Capon Bridge, WV 26711	H.C. 64, Box 232 Romney, WV 26847	Autumn Kiser	304-822-4167	autumn.d.kiser@wv.gov	0514	-78.43888	39.300615	
	Slanesville	Route 29 Slanesville, WV 25444	H.C. 64, Box 232 Romney, WV 26847	Autumn Kiser	304-822-4167	autumn.d.kiser@wv.gov	0514	-78.50462	39.378318	
Hardy	Hardy County Headquarters	2104 State Route 55 Moorefield, WV 26836	2104 State Route 55 Moorefield, WV 26836	Donna Eve	304-434-2525	donna.k.eve@wv.gov	0516	-78.93765	39.067901	
	Baker Substation	County Route 29 Baker, WV 26801	2104 State Route 55 Moorefield, WV 26836	Donna Eve	304-434-2525	donna.k.eve@wv.gov	0516	-78.72676	39.063316	
Jefferson	Jefferson County Headquarters - 0519 Storage Bldg	1301 Leetown Pike Keameysville, WV 25430	1301 Leetown Pike Keameysville, WV 25430	Leslie Stout	304-725-5821	leslie.r.stout@wv.gov	0519	-77.91561	39.336894	
	9/340 Expressway Headquarters - 0564 Storage Bldg	1301 Leetown Pike Keameysville, WV 25430	1301 Leetown Pike Keameysville, WV 25430	Kevin Dodson	304-725-5821	kevin.m.dodson@wv.gov	0564	-77.91561	39.336894	
Mineral	Mineral County Headquarters	HC 72, Box 72AA (US Route 50) New Creek, WV 26743	H.C. 72, Box 72AA New Creek, WV 26743	Mike Kitzmiller	304-788-1221	michael.e.kitzmiller@wv.gov	0529	-79.04336	39.360905	
	Skyline Substation	Route 42 Elk Garden, WV 26717	H.C. 72, Box 72AA New Creek, WV 26743	Mike Kitzmiller	304-788-1221	michael.e.kitzmiller@wv.gov	0529	-79.13001	39.324313	
	Short Gap Substation	Route 28 Ridgely, WV 26753	H.C. 72, Box 72AA New Creek, WV 26743	Mike Kitzmiller	304-788-1221	michael.e.kitzmiller@wv.gov	0529	-78.80772	39.537577	
	District 5 Headquarters	US Route 50 Burlington, WV 26710	P.O. Box 99 Burlington, WV 26710	Jim Wolford	304-289-2261	jim.d.wolford@wv.gov	0567	-78.91364	39.338331	
Morgan	Morgan County Headquarters	166 DOH Lane (off of US 522) Berkeley Springs, WV 25411	166 DOH Lane Berkeley Springs, WV 25411	Jane Munson	304-258-2578	jane.e.munson@wv.gov	0533	-78.24245	39.603317	
	Largent Substation	Route 9 Great Cacapon, WV 25422	166 DOH Lane Berkeley Springs, WV 25411	Jane Munson	304-258-2578	jane.e.munson@wv.gov	0533	-78.38059	39.481842	

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 6

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location Location Details / Notes
Brooke	Brooke County HQ	WV Route 2, Box 615 Wellsburg, WV 26070	WV Route 2, Box 615 Wellsburg, WV	Beth Green	304-238-1199	beth.a.green@wv.gov	0605	-80.609200	40.291300	
	US 22 Substation	1225 Rice Road Weirton, WV 26062	WV Route 2, Box 615 Wellsburg, WV	Beth Green	304-238-1199	beth.a.green@wv.gov	0605	-80.567662	40.395117	
Hancock	Hancock County HQ	1936 Veterans Blvd New Cumberland, WV 26047	1936 Veterans Blvd New Cumberland, WV	Vicki West	304-238-1200	vicki.l.west@wv.gov	0615	-80.596400	40.528700	
Marshall	Marshall County HQ	100 Wheeling Avenue Glen Dale, WV 26038	100 Wheeling Avenue Glen Dale, WV	Doris McCardle	304-843-4055	doris.v.mccardle@wv.gov	0626	-80.753200	39.954600	
	Cameron Substation	33 Courtright Lane Cameron, WV 26033	100 Wheeling Avenue Glen Dale, WV 26038	Doris McCardle	304-843-4055	doris.v.mccardle@wv.gov	0626	-80.554600	39.819600	
	Sand Hill Substation	RD 4, Box 269A Cameron, WV 26033	100 Wheeling Avenue Glen Dale, WV 26038	Doris McCardle	304-843-4055	doris.v.mccardle@wv.gov	0626	-80.542377	39.952418	
	Lynn Camp Substation	438 Richmond Lane Glen Easton, WV 26039	100 Wheeling Avenue Glen Dale, WV 26038	Doris McCardle	304-843-4055	doris.v.mccardle@wv.gov	0626	-80.674667	39.810047	
Ohio	Ohio County HQ	3870 National Road Triadelphia, WV 26059	3870 National Road Triadelphia, WV	Nicholas Yelanich	304-238-1201	nicholas.m.yelanich@wv.gov	0635	-80.635600	40.047500	
	I-70 Interstate HQ	566 Woodland Acres Road Wheeling, WV 26003	566 Woodland Acres Road Wheeling, WV 26003	Valerie White	304-238-1202	valerie.m.white@wv.gov	0671	-80.634341	40.044256	
Tyler	Tyler County HQ	730 Tyler Highway Sistersville, WV 26175	2566 Tyler Highway Sistersville, WV	Thelma Deaton	304-843-4057	thelma.f.deaton@wv.gov	0648	-80.965163	39.540286	
	Centerville Substation	4901 Middle Island Road Alma, WV 26320	730 Tyler Highway Sistersville, WV	Thelma Deaton	304-843-4057	thelma.f.deaton@wv.gov	0648	-80.835687	39.412453	
Wetzel	Wetzel County HQ	N. State Route 2, Box 641 New Martinsville, WV 26155	N. State Route 2, Box 641 New Martinsville, WV	Donna Palmer	304-843-4058	donna.l.palmer@wv.gov	0652	-80.856100	39.682300	
	Pine Grove Substation	WV 20, MP 17.14 Pine Grove, WV 26419	N. State Route 2, Box 641 New Martinsville, WV	Donna Palmer	304-843-4058	donna.l.palmer@wv.gov	0652	-80.696000	39.564700	
	Hundred Substation	US 250, MP3.00 Hundred, WV 26575	N. State Route 2, Box 641 New Martinsville, WV	Donna Palmer	304-843-4058	donna.l.palmer@wv.gov	0652	-80.443000	39.670500	

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 7

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Elev	Lat	Delivery Location
										Location Details / Notes
Barbour	Barbour County HQ (000111)	1439 Mansfield Drive Philippi, WV 26416	P. O. Box 1228 Weston, WV 26452	Delphia Shrader	304-457-1597	delphia.lshrader@wv.gov	0701	-80.0659	39.1421	
	Belington Substation (000113)	248 Dunham Cui Road Belington, WV 26250	P. O. Box 1228 Weston, WV 26452	Delphia Shrader	304-457-1597	delphia.lshrader@wv.gov	0701	-79.9225	309.0332	
Braxton	Braxton County HQ (000444)	1001 State Street Cassaway, WV 26624	P. O. Box 1228 Weston, WV 26452	Krystle Morris	304-364-5238	Krystle.J.Morris@wv.gov	0704	-80.7528	38.6608	
	Heaters Substation (000431)	5206 Gauley Turnpike Heaters, WV 26627	P. O. Box 1228 Weston, WV 26452	Krystle Morris	304-364-5238	Krystle.J.Morris@wv.gov	0704	-80.6252	38.7622	
	Coon Knob Substation (000405)	80 Coon Knob, DOH Road Sutton, WV 26601	P. O. Box 1228 Weston, WV 26452	Eric Bellnap	304-364-8440	Eric.D.Bellnap@wv.gov	0771	-80.7563	38.6213	
	Burnsville Substation (000432)	888 Burnsville Road Burnsville, WV 26335	P. O. Box 1228 Weston, WV 26452	Scottie Stout	304-853-2454	Scottie.J.Stout@wv.gov	0772	-80.6739	38.8659	
Gilmer	Gilmer County HQ (001110)	3531 US 33, East Glennville, WV 26351	P. O. Box 1228 Weston, WV 26452	Deanna Shackelford	304-462-7325	Deanna.D.Shackelford@wv.gov	0711	-80.7926	38.9619	
Lewis	Lewis County HQ (002108)	937 US 19, South Weston, WV 26452	P. O. Box 1228 Weston, WV 26452	Monica Rogers	304-269-0470	monica.m.rogers@wv.gov	0721	-80.4764	39.0169	
	APD (Weston Mudlick) (002187)	309 Mudlick Road Weston, WV 26452	P. O. Box 1228 Weston, WV 26452	Roger Sisk	304-473-4304	roger.l.sisk@wv.gov	0782	-80.4311	39.0206	
Upshur	Clow Lot/Upshur County HQ (004912)	493 Mudlick Road Buckhannon, WV 26201	P. O. Box 1228 Weston, WV 26452	Aleece Williams	304-473-4225	a.aleece.williams@wv.gov	0749	-80.2546	39.0116	
	Tennerton/Upshur County SubHQ (004903)	646 Route 20, South Buckhannon, WV 26201	P. O. Box 1228 Weston, WV 26452	Aleece Williams	304-473-4225	a.aleece.williams@wv.gov	0749	-80.3495	38.7718	
	Kanawha Head	18022 Route 20, South Buckhannon, WV 26201	P. O. Box 1228 Weston, WV 26452	Aleece Williams	304-473-4225	a.aleece.williams@wv.gov	0749	-80.35078	-38.78063	
Webster	Cherry Falls	808 Point Mountain Road Webster Springs, WV 26288	P. O. Box 1228 Weston, WV 26452	Theresa Gibson	304-847-2114	theresa.j.gibson@wv.gov	0751	-80.39372	-38.46458	
	RT 20/Cowen Substation (005110)	6402 Webster Road Cowen, WV 26206	P. O. Box 1228 Weston, WV 26452	Theresa Gibson	304-847-2114	theresa.j.gibson@wv.gov	0751	-80.5354	38.4094	
	Webster County HQ @ Bolair	2377 Webster Road Webster Springs, WV 26288	P. O. Box 1228 Weston, WV 26453	Theresa Gibson	304-847-2114	theresa.j.gibson@wv.gov	0751	-80.433731	38.444788	
	Hacker Valley Substation (005120)	56 Pickens Grade Road Hacker Valley WV 26222	P. O. Box 1228 Weston, WV 26452	Theresa Gibson	304-847-2114	theresa.j.gibson@wv.gov	0751	-80.3799	38.6519	

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P065

ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 8

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location
										Location Details / Notes
Pendleton	Franklin / 220 North Lot	3153 Petersburg Pike US 220N, Franklin, WV 26807	P. O. Box 1516 Elkins, WV 26241	Joe Mullens	304-358-2702	joeph.mullens@wv.gov	0836	-79.326894	38.682757	US 220 -- 2.20 Mi. North Jct. US 33 & US 220
	Judy Gap Substation	12795 Mountaineer Drive US 33, Riverton, WV 26814	P. O. Box 1516 Elkins, WV 26241	Joe Mullens	304-358-2702	joeph.mullens@wv.gov	0836	-79.467481	38.711186	US 33 - 0.5 mi. North of Jct. US 33 & WV 28
	Brandwine Stockpile	12211 Blue Gray Trail CR 21, Brandwine, WV 26802	P. O. Box 1516 Elkins, WV 26241	Joe Mullens	304-358-2702	joeph.mullens@wv.gov	0836	-79.236129	38.622249	US 33 -- 0.60 Mi. East of Jct. CR 21 & US 33
	Onego Stockpile	3354 Allegheny Drive US 33, Seneca Rocks, WV 26884	P. O. Box 1516 Elkins, WV 26241	Joe Mullens	304-358-2702	joeph.mullens@wv.gov	0836	-79.426343	38.852193	US 33 -- 0.50 Mi. West of Jct. US 33 & CR 5/1
	Sugar Grove Substation	9315 Sugar Grove Road 21, Sugar Grove, WV 26815	CO P. O. Box 1516 Elkins, WV 26242	Joe Mullens	304-358-2703	joeph.mullens@wv.gov	0836	-79.305028	38.519257	CO 21 - 9.40 Mi. South of Jct. US 33 & CO 21
	Franklin / Rt 220 South Lot	6591 Upper South Branch Road US 220S, Franklin, WV 26807	P. O. Box 1516 Elkins, WV 26241	Joe Mullens	304-358-2702	joeph.mullens@wv.gov	0836	-79.410338	38.585892	US 220 -- 2.07 Mi. North of Jct. CO 25 & US 220
Pocahontas	Pocahontas County HQ	25 Brush Country Rd US 219, Marlinton, WV 24954	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-80.087167	38.238067	US 219 -- A1 Jct. US 219 & CR 15
	Soebert Stockpile	863 Soebert Rd CR 27, Soebert, WV 24946	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-80.186737	38.136082	CR 27 -- 1.0 Mile East of US 219
	Green Bank Substation	4757 Potomac Highlands Trail WV 28, Green Bank, WV 24944	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-79.842462	38.416242	WV 28 -- 0.50 Mi. South of Jct. WV 28 & CR 28/24
	Barrow Lot	156 Thornwood Rd WV 28, Barrow, WV 24920	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-79.760539	38.547641	CO 28/19 -- 0.17 Mi. North of Jct. WV 28 & CO 28/19
	Snowshoe Stockpile	24 Shavers Lake Rd CR 9/3, Snowshoe, WV 26209	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-79.995836	38.435312	CO 9/3 -- Silver Lake Road
	Slaty Fork Stockpile	35807 Seneca Trail US 219, Slaty Fork, WV 26291	P. O. Box 1516 Elkins, WV 26241	Josh Dilley	304-799-4867	joshua.dilley@wv.gov	0838	-80.098980	38.418395	US 219 -- 3.0 Miles South of WV 66
Randolph	Randolph County HQ	76 Country Club Rd CR 219/11, Elkins, WV 26241	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-79.848604	38.888936	0.10 Mi. S. JCT 219/11 US219 US230
	Harman Substation	22445 Allegheny Highway US 33, Harman, WV 26270	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-79.522874	38.921273	Intersection of US 33 & WV 32
	Alpena Salt Shed	50 Gladys Fork Road 27, Bowden, WV 26254	CO P. O. Box 1516 Elkins, WV 26242	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-79.654557	38.906763	Intersection of US 33 & CO 27
	Coalton Substation	2453 Coalton-Pumpkinown Rd CR 53, Coalton, WV 26257	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-79.976773	38.907759	CR 53 -- near Jct. CR 53 & CR 5/3
	Valley Head Substation	245 Point Mountain Rd WV 15, Valley Head, WV 26294	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-80.037778	38.551946	WV 15 -- 0.10 Mi. SW Jct. of US 219 & WV 15
	Mill Creek Substation	9407 Seneca Trail US 219, Mill Creek, WV 26280	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-79.966415	38.737338	US 250/35 219 -- 0.67 Mi. N. Jct. of CR 46
	Pickens Substation	1019 Pickens Rd CR 45, Pickens, WV 26230	P. O. Box 1516 Elkins, WV 26241	Keith Phillips	304-637-0266	keith.d.phillips@wv.gov	0842	-80.200313	38.657067	CR 45 -- at the Jct. of CR 46/1 & CR 45
	Corridor H	489 Leading Creek Rd US 219N, Elkins, WV 26241	P. O. Box 1516 Elkins, WV 26241	David Skidmore	304-637-0220	david.skidmore@wv.gov	0882	-79.850291	38.973147	US 48 -- 0.52 Mi. W CO 1 Connector
Tucker	Tucker County HQ	9209 Seneca Trail US 219, Parsons, WV 26287	P. O. Box 1516 Elkins, WV 26241	Scott Hebb	304-478-2304	scott.hebb@wv.gov	0847	-79.655486	39.091667	US 219/WV 72 -- 0.10 Mi. S. Jct. CR 219/11
	Thomas Substation	15933 Appalachian Highway WV 32, Thomas, WV 26292	P. O. Box 1516 Elkins, WV 26241	Scott Hebb	304-478-2304	scott.hebb@wv.gov	0847	-79.656404	39.091800	WV 32 -- at Jct. of CR 32/1
	Corridor H - Thomas	15933 Appalachian Highway WV 32, Thomas, WV 26292	P. O. Box 1516 Elkins, WV 26241	Greg Roy	304-642-1140	no email	0883	-79.495730	39.141724	WV 32 -- at Jct. of CR 32/1

**ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3**

DISTRICT 9

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location
										Location Details / Notes
Fayette	Oak Hill APD	3121 Main Street, WV 16 Oak Hill, WV 25901	146 Stonehouse Road Lewisburg, WV 24901	John Dixon	304-465-1832	john.c.dixon11@wv.gov	0982	-81.133700	37.999100	
	Lookout Substation	4064 Clifftop Road Lookout, WV 25868	146 Stonehouse Road Lewisburg, WV 24901	Michael Knight	304-574-0373	john.c.dixon11@wv.gov	0910	-80.951700	38.048500	
	Falls View Substation	5727 Midland Trail Charlton Heights, WV 25040	146 Stonehouse Road Lewisburg, WV 24901	Steve Harrell	304-779-2860	steven.l.harrell@wv.gov	0910	-81.244500	38.125800	
Greenbrier	Greenbrier County HQ	700 N Jefferson Street, US 219 Lewisburg, WV 24901	146 Stonehouse Road Lewisburg, WV 24901	Shaun Viers	304-647-7465	shaun.d.viers@wv.gov	0913	-80.420600	37.822100	
	Crawley Substation	157 Midland Trail / West, US 60 Crawley, WV 24931	146 Stonehouse Road Lewisburg, WV 24901	Rick Viers	304-392-6712	richard.a.viers@wv.gov	0913	-80.632600	37.908100	
	Harts Run Substation	297 John Bowling Jr Lane Caldwell, WV 24925	146 Stonehouse Road Lewisburg, WV 24901	Mart Curry	304-536-1472	matthew.r.curry@wv.gov	0971	-80.347100	37.772300	
Monroe	Monroe County HQ	875 Sweet Springs Valley Road Union, WV 24983	146 Stonehouse Road Lewisburg, WV 24901	Shannon Brim	304-772-3037	shannon.r.brim@wv.gov	0932	-80.528100	37.592200	
	Peterstown Substation	511 Ballard-Red Sulphur Parkway Peterstown, WV 24963	146 Stonehouse Road Lewisburg, WV 24901	Elwin Dillon	304-753-9778		0932	-80.794300	37.402600	
Nicholas	Nicholas County HQ	777 Turnpike Road, WV 39 Summersville, WV 26651	146 Stonehouse Road Lewisburg, WV 24901	Charles Reel	304-872-0811	charles.j.reel@wv.gov	0934	-80.867700	38.290100	
	Curtin Substation	5498 Richwood Road Richwood, WV 26261	146 Stonehouse Road Lewisburg, WV 24901	Eddie Barlett	304-846-9501	charles.j.reel@wv.gov	0934	-80.635500	38.285400	
	Corridor L/Muddlety Substation	50 State Garage Road, Muddlety Summersville, WV 26651	146 Stonehouse Road Lewisburg, WV 24901	Terry Bosely	304-872-0823	Terry.L.Bosely@wv.gov	0983	-80.829800	38.369900	
Summers	Summers County HQ	20414 State Route 12 Hinton, WV 25951	146 Stonehouse Road Lewisburg, WV 24901	James Hardy	304-466-2802	james.e.hardy@wv.gov	0945	-80.791100	37.620700	

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

DISTRICT 10

County	Delivery Site Designation	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Org. No.	Long	Lat	Delivery Location	Location Details / Notes
McDowell	McDowell County HQ	100 Headquarters Lane Havaco, WV 24801	270 Hardwood Lane Princeton, WV 24740	Andrew Thomas	304-436-6896	loyd.a.thomas@wv.gov	1024	-81.572303	37.399177		
				Patricia Wagers	304-436-8411	patricia.a.wagers@wv.gov					
	Yukon Substation	383 Marshall Highway Yukon, WV 24892	270 Hardwood Lane Princeton, WV 24740	Andrew Thomas	304-436-6896	loyd.a.thomas@wv.gov	1024	-81.696982	37.320782		
				Patricia Wagers	304-436-8411	patricia.a.wagers@wv.gov					
	Johnn Cake Substation	72 Coal Heritage Rd Johnn Cake, WV 24844	270 Hardwood Lane Princeton, WV 24740	Andrew Thomas	304-436-6896	loyd.a.thomas@wv.gov	1024	-81.811437	37.505975		
				Patricia Wagers	304-436-8411	patricia.a.wagers@wv.gov					
Ravsal	8388 Marshall Highway WV 83 Ravsal, WV 24879	270 Hardwood Lane Princeton, WV 24740	Andrew Thomas	304-436-6896	loyd.a.thomas@wv.gov	1024	-81.779132	37.346217			
			Patricia Wagers	304-436-8411	patricia.a.wagers@wv.gov						
Mercer	Mercer County HQ	454 New Hope Rd Princeton, WV 24740	270 Hardwood Lane Princeton, WV 24740	Kevin Belcher	304-425-2782	kevin.g.belcher@wv.gov	1028	-81.115398	37.366396	WV 20 -- 0.10 Mi. W. of Princeton at Jct. WV 104	
				Melissa D. Midkiff	304-425-2025	melissa.d.midkiff@wv.gov					
	Flat Top Substation	21585 Beckley Road Flat Top, WV 25841	270 Hardwood Lane Princeton, WV 24740	Kevin Belcher	304-425-2782	kevin.g.belcher@wv.gov	1028	-81.108332	37.587853		
				Melissa D. Midkiff	304-425-2025	melissa.d.midkiff@wv.gov					
I-77 near Princeton	320 Ambrose Lane Princeton, WV 24740	270 Hardwood Lane Princeton, WV 24740	Joey Smith	304-487-5280	joey.smith@wv.gov	1071	-81.055387	37.358522			
			Richard A. Cregger	304-487-5228	richard.a.cregger@wv.gov						
Raleigh	Raleigh County HQ	379 Market Road Beckley, WV 25801	270 Hardwood Lane Princeton, WV 24740	Johnny Vass	304-256-6830	johnny.a.vass@wv.gov	1041	-81.188918	37.812597	Located on County route 21/04 at Skelton	
				Jeremy Canady	304-573-0524	jeremy.w.canady@wv.gov					
				Marcia McGrady	304-256-6746	marcia.d.mcgrady@wv.gov					
	Bolt Substation	2314 Bolt Road Bolt, WV 25817	270 Hardwood Lane Princeton, WV 24740	Johnny Vass	304-256-6830	johnny.a.vass@wv.gov	1041	37.764016	37.764016		
				Jeremy Canady	304-573-0524	jeremy.w.canady@wv.gov					
				Marcia McGrady	304-256-6746	marcia.d.mcgrady@wv.gov					
Braun Substation	200 Samaritan Drive Shady Springs, WV 25918	270 Hardwood Lane Princeton, WV 24740	Robert Hebb	304-763-5312	robert.r.hebb@wv.gov	1072	-80.984845	37.773654			
			Jeremy Canady	304-573-0524	jeremy.w.canady@wv.gov						
Wyoming	Wyoming County HQ	1409 Bearhole Rd (WV 97) Pineville, WV 24874	270 Hardwood Lane Princeton, WV 24740	Shannon Stewart	304-732-9372	shannon.b.stewart@wv.gov	1055	-81.509619	37.391109		
				Eva England	304-732-7031	eva.m.england@wv.gov					
	Still Run Substation	9390 River Road Still Run, WV 25882	270 Hardwood Lane Princeton, WV 24740	Shannon Stewart	304-732-9372	shannon.b.stewart@wv.gov	1055	-81.434440	37.578902		
				Eva England	304-732-7031	eva.m.england@wv.gov					
	Hanover Outpost	2959 US 52 Hanover, WV 24839	270 Hardwood Lane Princeton, WV 24740	Shannon Stewart	304-732-9372	shannon.b.stewart@wv.gov	1055	-81.798082	37.572979		
Eva England				304-732-7031	eva.m.england@wv.gov						

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ROADWAY SALT - SODIUM CHLORIDE
WVDOH DELIVERY SITE INFORMATION - EXH 3

WV PARKWAYS AUTHORITY

County	Delivery Site Description	Physical Address	Bill-to Address	Contact Name	Contact Phone	Contact Email	Delivery Location		
							Long	Lat	Location Details / Notes
Kanawha	Chelyan Maintenance	Slaughters Creek Rd at Rt 61 Cabin Creek, WV 25035	WV Parkways, Finance Dept. PO Box 1469 Charleston, WV 25325-1469	Curtis Redden	304.640.0432	credden@wvturnpike.com	-81.498655	38.194019	Chelyan, I-77 Exit 85 Across from Paul White Chevrolet Dealer
				Brian Grose	304.640.8611	bgrose@wvturnpike.com			
	Standard Maintenance	6951 Paint Creek Road Standard, WV 25083	WV Parkways, Finance Dept. PO Box 1469 Charleston, WV 25325-1469	Curtis Redden	304.640.0432	credden@wvturnpike.com	-81.386304	38.116673	Exit 74, south on state route 83 approximately 1 mile
				Brian Grose	304.640.8611	bgrose@wvturnpike.com			
Mercer	Princeton Maintenance	297 Ambrose Lane Princeton, WV 24740	WV Parkways, Finance Dept. PO Box 1469 Charleston, WV 25325-1469	Curtis Redden	304.640.0432	credden@wvturnpike.com	-81.054155	37.359867	Princeton, I-77 exit 9 Behind Texas Steakhouse
				Brian Grose	304.640.8611	bgrose@wvturnpike.com			
Raleigh	Beckley Maintenance	201 Pikeview Dr Beckley, WV 25801	WV Parkways, Finance Dept. PO Box 1469 Charleston, WV 25325-1469	Curtis Redden	304.640.0432	credden@wvturnpike.com	-81.211852	37.799054	Beckley, I-77 Exit 44, north on Pikeview drive approximately 1/2 mile
				Brian Grose	304.640.8611	bgrose@wvturnpike.com			
	Ghent Maintenance	Odd Road at I-77 WV Tollway Milepost 30, WV 25843	WV Parkways, Finance Dept. PO Box 1469 Charleston, WV 25325-1469	Curtis Redden	304.640.0432	credden@wvturnpike.com	-81.117129	37.615251	Ghent, I-77 Exit 28, East on SR 48 approximately 1/10 mile
				Brian Grose	304.640.8611	bgrose@wvturnpike.com			

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American Rock Salt

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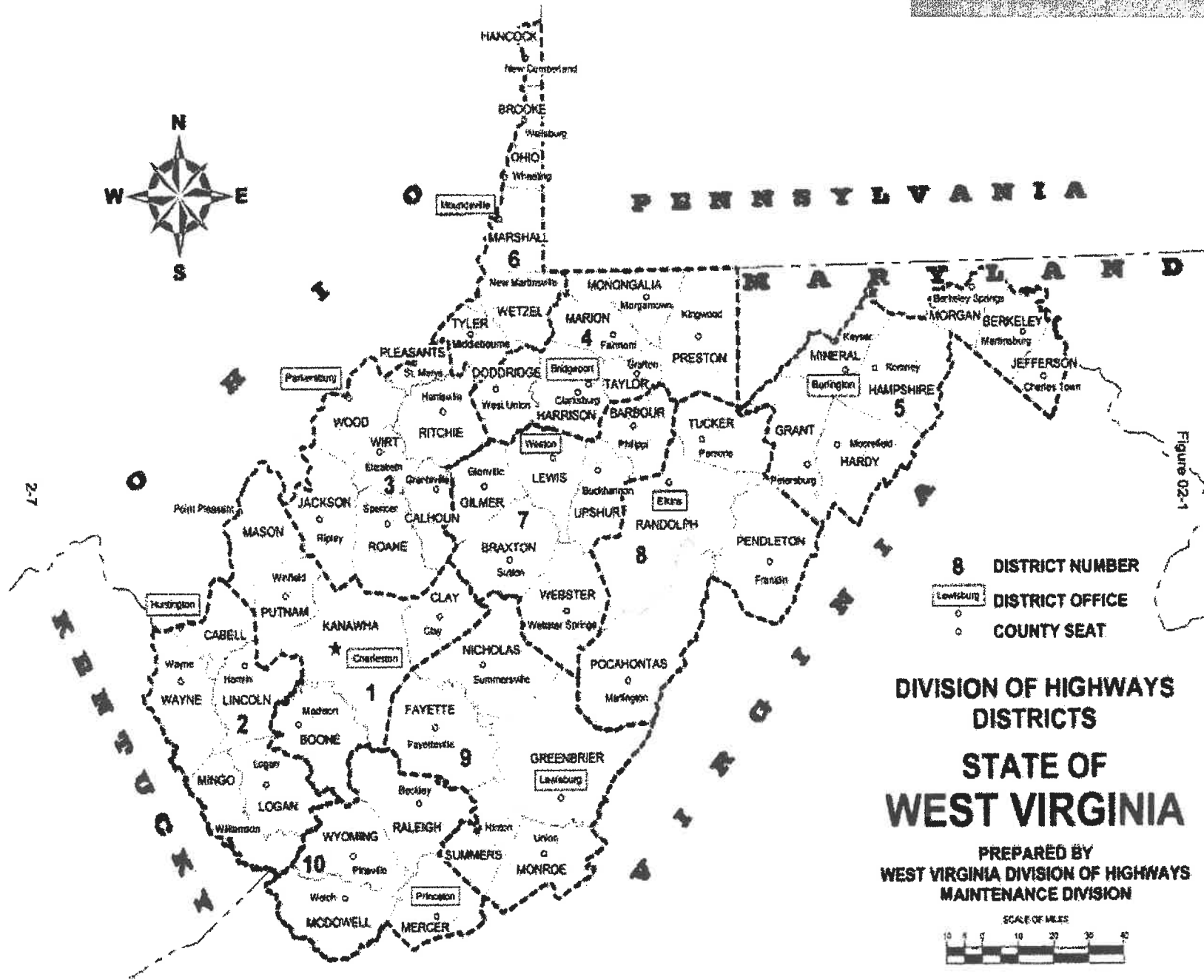
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SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

1.1 COMMON NAME:	Rock Salt, Halite, Salt
CHEMICAL NAME:	Sodium Chloride
CHEMICAL FORMULA:	NaCl
CAS#:	7647-14-5
PRODUCT NAMES AS LABELED:	Bulk Ice Control (Product Number BIC)
1.2 PRODUCT USE:	The de-icing of roads, walkways and surfaces
1.3 MANUFACTURER'S NAME:	American Rock Salt Company LLC
ADDRESS:	5520 Route 63, Mount Morris, New York 14510
BUSINESS PHONE:	1-585-243-9510
FAX NUMBER:	1-585-243-4353
WEB SITE:	www.americanrocksalt.com
1.4 EMERGENCY PHONE NUMBER:	
EMERGENCY PHONE #:	1-585-243-9544
EMAIL:	SDS@americanrocksalt.com
1.5 PREPARATION INFORMATION:	
DATE OF CURRENT REVISION:	August 13, 2018 (Rev 2)
DATE OF LAST REVISION:	June 10, 2015 (Rev 1)

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a white to off-white crystalline solid with no odor.

Health Hazards: Exposure to this product may cause irritation to eyes. Prolonged contact may cause skin irritation. May cause respiratory tract irritation.

Flammability Hazards: This product is a non-flammable solid.

Reactivity Hazards: None known

Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this product is not expected to have significant adverse effects in the aquatic environment.

2.1 CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

Component(s) Contributing to Classification(s)

Sodium Chloride

2.2 LABEL ELEMENTS:

GHS Pictograms:



Signal Word: **WARNING!**

GHS Hazard Classification(s):

Skin Irritant Category 2

Eye Irritant Category 2A

STOT SE Category 3

Hazard Statement(s):

H315: Causes skin irritation

H319: Causes serious eye irritation

H335: May cause respiratory irritation



SAFETY DATA SHEET

Prevention Statement(s):

- P261: Avoid breathing fume/mist/vapors/spray.
 P264: Wash skin after handling.
 P271: Use only outdoors or in a well-ventilated area.
 P280: Wear protective gloves/protective clothing/eye protection.

Response Statement(s):

- P302+P352: IF ON SKIN: Wash with plenty of water.
 P321: Specific treatment (See section 4 of this SDS).
 P332+P313: If skin irritation occurs: Get medical advice/attention.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312: Call a POISON CENTER/doctor if you feel unwell.

Storage Statement(s):

- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
 P405: Store locked up.

Disposal Statement(s):

- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of exposure for this product are by inhalation, skin contact, eye contact or ingestion.

ACUTE:

INHALATION: Inhalation may be irritating to the respiratory tract.

CONTACT WITH SKIN: Repeated or prolonged contact may cause skin irritation.

EYE CONTACT: Contact may irritate the eyes, resulting in redness or watering.

INGESTION: Ingestion of a large quantity may cause gastrointestinal irritation with nausea and vomiting.

CHRONIC: None known

TARGET ORGANS: Acute: Eyes, Skin, Respiratory System

Chronic: None Known

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Index #	GHS Classifications
Sodium Chloride	>99%	7647-14-5	231-598-3	Not Listed	Skin Irritant Cat 2, Eye Irritant Cat 2A, STOT SE Cat 3
YPS (Yellow Prussiate of Soda) Sodium Ferrocyanide	0.0075%	13601-19-9	237-081-9	Not Listed	Eye Irritant Cat 2A
Liquid Calcium Chloride (Anhydrous, 20 – 45% CaCl ₂ Solution)	0.0017%	10043-52-4	233-140-8	017-013-00-2	Eye Irritant Cat 2A
Liquid Calcium Chloride may be present on salt. Added to YPS delivery system during cold months					
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: If product contacts skin, wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.



SAFETY DATA SHEET

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known

4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Exposure to this product may cause irritation to skin and eyes. Inhalation of dust may cause irritation to respiratory system. May be harmful if swallowed with digestive tract irritation and vomiting.

4.3 RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

Use fire extinguishing methods below:

Water Spray: Yes

Carbon Dioxide: Yes

Foam: Yes

Dry Chemical: Yes

Halon: Yes

Other: Any "C" Class

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

None known

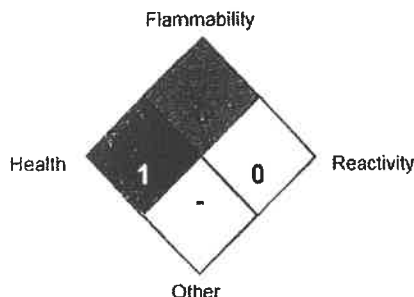
Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD (BLUE)			
PHYSICAL HAZARD (YELLOW)			
			0
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

See section 8.2 for Exposure Controls.

6.2 ENVIRONMENTAL PRECAUTIONS:

No specific hazards connected with leaks and spills.

6.3 SPILL AND LEAK RESPONSE:

Sweep up spilled materials and place in appropriate container for disposal or re-use. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Establish good personal hygiene and work practices. Always wash hands and face before eating, drinking or smoking.

7.2 STORAGE AND HANDLING PRACTICES:

Store in a dry area with <75% relative humidity to avoid caking.



SAFETY DATA SHEET

7.3 SPECIFIC USES:

De-icing roads and walkways.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Sodium Chloride	7647-14-5	10 mg/m ³ Total Dust	15 mg/m ³ Total Dust

8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not normally required when using this product. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION Safety glasses or goggles are recommended to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Protective gloves are recommended to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protect appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is a white to off-white crystalline solid with no odor.

ODOR: None

ODOR THRESHOLD: Not Applicable

pH: Not Applicable

MELTING/FREEZING POINT: Not Applicable

BOILING POINT: >2575°F

FLASH POINT: Not Applicable

EVAPORATION RATE (n-BuAc=1): Not Available

FLAMMABILITY (SOLID, GAS): Not Applicable

UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Applicable

VAPOR PRESSURE (mm Hg @ 20°C (68°F): 2.4 mm @ 1376°F

VAPOR DENSITY: Not Applicable

RELATIVE DENSITY: Not Applicable

DENSITY: Not Applicable

SPECIFIC GRAVITY: 2.165

SOLUBILITY IN WATER: 317 g/l @ 60°F

WEIGHT PER GALLON: Not Available

PARTITION COEFFICIENT (n-octanol/water): Not Applicable

AUTO-IGNITION TEMPERATURE: Not Applicable

DECOMPOSITION TEMPERATURE: Not Available

VISCOSITY: Not Available

VOC g/l / Lb/gal: 0

9.2 OTHER INFORMATION:

No additional information available.



SAFETY DATA SHEET

10. STABILITY and REACTIVITY

10.1 REACTIVITY:

This product is not reactive.

10.2 STABILITY:

Stable under conditions of normal storage and use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Chemical reactions occur when this product is involved with strong acids such as sulfuric or nitric acid.

10.4 CONDITIONS TO AVOID:

Incompatible materials.

10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

Strong acids.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products include hydrochloric acid.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA:

CAS#: 7647-14-5

Oral, rat: LD50 = 3,000 mg/kg;

SUSPECTED CANCER AGENT: None of the ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin, eyes or respiratory system.

SENSITIZATION TO THE PRODUCT: This product is not considered a respiratory system or skin sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Eyes, Respiratory System and Skin

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: None known

ASPIRATION HAZARD: None

12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

This material is water soluble and occurs naturally, and is unlikely to have any long term effect on the environment.

However, large or frequent applications or spills can have a potentially damaging effect on the environment.

12.2 PERSISTENCE AND DEGRADABILITY:

This material is not organic and therefore does not undergo biodegradation.

12.3 BIOACCUMULATIVE POTENTIAL:

Based on available information, the sodium chloride present may bioaccumulate in some aquatic organisms.

12.4 MOBILITY IN SOIL:

This material is water soluble and is expected to move rapidly with surface water or ground water flows.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

12.6 OTHER ADVERSE EFFECTS:

No specific data available on this product.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.7 WATER ENDANGERMENT CLASS:

Water endangering in accordance with EU Guideline 91/155-EWG. Not determined

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.



SAFETY DATA SHEET

13.2 EU Waste Code:

Not determined.

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

14.1 PROPER SHIPPING NAME: Non-Regulated Material

14.2 HAZARD CLASS NUMBER and DESCRIPTION: None

14.3 UN IDENTIFICATION NUMBER: None

14.4 PACKING GROUP: None

14.5 DOT LABEL(S) REQUIRED: None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

RQ QUANTITY: None

14.6 MARINE POLLUTANT: None of the components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.7 SPECIAL PRECAUTIONS FOR USER:

Avoid exposure

14.8 INTERNATIONAL TRANSPORTION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

14.9 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

15.1 UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: All components are DSL Listed, NDSL Listed and/or are exempt from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product has been classified per WHMIS 2015.

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for full Details.

15.4 AUSTRALIAN INFORMATION FOR PRODUCT:

The components of this product are listed on the International Chemical Inventory list.



SAFETY DATA SHEET

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS:

The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY:

The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW:

No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftlist List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

16.1 ABBREVIATIONS AND ACRONYMS:

ARD: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

PREPARED BY: Chris Eigbrett (**MSDS to GHS Compliance**)

All statements, technical information and recommendations contained herein are, to the best of our knowledge, reliable and accurate, however, no warranty, either expressed or implied, is made with respect thereto, nor will any liability be assumed for damages resultant from the use of the material described.

It is the responsibility of the user to comply with all applicable federal, state and local regulations. It is also the responsibility of the user to maintain a safe workplace. The user should consider the health hazards and safety information provided herein as a guide and should take the necessary steps to instruct employees and to develop work practice procedures to ensure a safe work environment.

This information is not intended as a license to operate under, or a recommendation to practice or infringe upon any patent of the company or others covering any process, composition of matter or use.

END OF SDS SHEET



YELLOW PRUSSATE OF SODA

American Rock salt is treated with Yellow Prussiate of Soda for anti-caking requirements.

1. DESCRIPTION

The Chemical name for this additive is Sodium Ferrocyanide, a non-toxic food grade additive. The application is in liquid form at a ratio of 75 PPM.

2. SOLUBILITY

Yellow Prussiate of Soda is 100% soluble in water.

3. PHOTODECOMPOSTION

Yellow Prussiate of Soda in the outer crust of untarped or uncovered salt will decompose in ultra violet light or sunlight although this reaction is a slow process.

4. YPS is dissolved in water and applied as a spray to the salt on the conveyor system before being loaded into trucks, rail cars or stored in stockpiles.

Primary analytical method

1. PRINCIPLE

Sodium Ferrocyanide (YPS) is converted to Ferric Ferrocyanide (Prussian Blue) in the presence of Ferrous Sulfate and read on a spectrophotometer at 725nm. Free Sodium Ferrocyanide (YPS) is readily converted to Prussian Blue and directly read on the spectrophotometer. However, under certain conditions, YPS may be converted to an insoluble form of Ferrocyanide which will not be detected by the free YPS method. In this case, to accurately determine the YPS concentration, an alkaline digestion is used, and the YPS is reported as Total YPS.

2. ESSENTIAL INSTRUMENTATION and REAGENTS

Spectrophotometer capable of measurement at 725nm, measuring cells conforming to instrument sample holder, ½ to 2 inches in width.

Sodium Ferrocyanide decahydrate – $\text{Na}_4\text{Fe}(\text{CN})_6 \cdot 10\text{H}_2\text{O}$
Ferrous Sulfate (5% solution prepared daily) – $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$
Sulfuric Acid concentrated – H_2SO_4
2% Sodium Hydroxide (wt/wt) NaOH
1:4 Hydrochloric Acid – HCl

3. PROCEDURE

- Standard Curve Preparation – A 1000 ppm stock standard can be prepared using 1.5927 g Sodium Ferrocyanide decahydrate dissolved in distilled water and diluted to 1 liter. Prepare a 10 ppm working standard from this stock solution. Transfer the appropriate aliquot of the working standard to each of ten numbered 100 ml. volumetric flasks as indicated in the following table.

Flask #	mls of working solution to add	Equivalent Micrograms Anhydrous YPS per ml.
1	0 (Blank)	0.0
2	2	0.2
3	3	0.3
4	5	0.5
5	8	0.8
6	10	1.0
7	15	1.5
8	20	2.0
9	30	3.0
10	40	4.0

- Add 5 ml. of 5% Ferrous Sulfate solution to each flask. Dilute to volume with brine solution prepared using YPS-free salt (see Reagent Preparation). Stopper, mix well and allow 15 minutes for color development. Immediately thereafter, zero the spectrophotometer with the blank and record the absorbances for the remaining concentration levels. Plot a standard curve of absorbance vs. concentration. Using linear regression, determine the correlation coefficient and the slope of the curve.
- A method blank, prepared using the following procedure, is required for each of the following YPS methods. Prepare the blank by dissolving 25 g of YPS free salt in 80 ml. of distilled water. The solution should be clear. However, if turbidity persists, filter the solution through two Gelman type "E" glass fiber filters. Add 5 ml. of 5% Ferrous Sulfate solution to the blank and dilute to volume with distilled water. Stopper, mix well and allow 15 minutes for color development. Immediately, zero spectrophotometer with the method blank and run a check standard to determine the validity of the calibration curve.

4. FREE YPS (ROCK SALT)

Weigh approximately 150 g of salt to the nearest hundredth of a gram and transfer the salt to a 1500 ml. beaker. Add 750 ml. distilled water and stir until the salt dissolves. Filter through two Gelman Type "E" glass fiber filters. The solution should be clear, however if turbidity persists filter the solution through a finer pore filter. Dilute the solution to 1 liter using distilled water and mix well. Add 5 ml. of 5% Ferrous Sulfate solution to a 100 ml. volumetric flask and add 5 ml. sample aliquots until a blue color appears. Record the ml. added and dilute to volume with distilled water. Stopper, mix well and allow 15 minutes for color development. Read the sample immediately and record the absorbance. Using the sample absorbance, the slope of the standard curve and the dilutions used to prepare the sample the concentration of YPS in the salt can be determined (refer to sample calculations).

5. TOTAL YPS (ROCK SALT)

Weigh approximately 150 g of salt to the nearest hundredth of a gram and transfer the salt to a 1500 ml. beaker. Add sufficient 2% Sodium Hydroxide to cover the salt and stir for 10 minutes. Then add 700 ml. distilled water and stir until the salt dissolves. Filter the solutions through two Gelman Type "E" glass fiber filters. The solution should be clear, however, if turbidity persists filter the solution through a finer pore filter. In a fume hood, adjust the pH of the solution to between 7.0 – 9.0 with 1:4 hydrochloric acid. Quantitatively transfer the solution to a liter volumetric flask, dilute to volume with distilled water and mix well. Add 5 ml. of 5% Ferrous Sulfate solution to a 100 ml. volumetric flask and add 5 ml. sample aliquots

until a blue color appears. Record the ml. added and dilute to volume with distilled water. Stopper, mix well and allow 15 minutes for color development. Read the sample immediately and record the absorbance. Using the sample absorbance, the slope of the standard curve and the dilutions used to prepare the sample the concentration of YPS in the salt can be determined (refer to sample calculations).

Total YPS – Free YPS = YPS converted to Prussian Blue (Bound).

6. SAMPLE CALCULATION

Total YPS

Sample Size	150.00 g
ml. aliquot to blue	25
Slope of the standard curve	0.1500
Sample Absorbance	0.035

Divide the sample absorbance by the slope to determine gamma, which represents the micrograms (ug) of YPS per ml. of solution in the flask. Divide gamma by the total dilution factor (D.F.) as calculated below, to determine the concentration in parts per million (ppm) of YPS in the salt.

$$\begin{aligned} \text{Tot D.F.} &= (150.00 \text{ g}/1000 \text{ ml.}) \times (25 \text{ ml.}/100 \text{ ml.}) \\ &= (.150) \times (.25) \\ &= 0.0375 \text{ g/ml.} \end{aligned}$$

Abs.	Ug/ml	D.F.	Ppm YPS
0.035	0.2333	0.0375	6.2

Step 1 $(0.035) / (0.1500) = 0.2333 \text{ ug/ml (gamma)}$

Step 2 $(0.2333 \text{ ug/ml}) / (0.0375 \text{ g/ml}) = 6.2 \text{ ug YPS/g salt (ppm)}$

Alternately, the concentration of the sample may be derived directly from the graph of the standard curve by taking the concentration corresponding to the sample absorbance and then dividing this value by the dilution factor (D.F.) to obtain the concentration of YPS in the salt.

7. REAGENT PREPARATION

Brine solution for standard curve – Dissolve 250 g of YPS-free salt in 800 ml. of distilled; deionized water. If the solution appears cloudy, filter the brine through a glass fiber filter, then dilute to 1 liter.

Ferrous Sulfate Solution – 5% (wt/wt) – (solution should be prepared fresh daily) – In a 100 ml. volumetric flask, dissolve 5 g Ferrous Sulfate in 80 ml. distilled water. In a fume hood, add 2 ml. concentrated sulfuric acid and dilute to volume.

Sodium Hydroxide – 2% (wt/wt) – in a 1 liter volumetric flask, dissolve 20 g sodium hydroxide in 800 ml. distilled water, then dilute to volume.

1:4 Hydrochloric Acid – In a fume hood, carefully add 25 ml. of concentrated hydrochloric acid to 75 ml. of distilled, deionized water. Mix well.

Safety Data Sheet

Date of Revision: 11/27/2017

Sodium Ferrocyanide

Section 1 - Chemical Product and Company Identification

WEGO CHEMICAL GROUP

239 Great Neck Road - Great Neck, NY 11021 - USA

Tel: +1 (516) 487 3510 - Fax: +1 (516) 487 3794

sales@wegochem.com - wegochem.com

Product/Chemical Name: Sodium Ferrocyanide

Chemical Formula: $\text{Na}_4\text{Fe}(\text{CN})_6 \cdot 10\text{H}_2\text{O}$

CAS Number: 14434-22-1

Other Designations: Sodium Ferrocyanide decahydrate; sodium hexacyanoferrate; YPS

Derivation:

General Use: Manufacture of sodium ferricyanide, blue pigments, blueprint paper, anti-caking agent for salt, ore flotation, pickling metals, polymerization catalyst, photographic fixing agent.

Emergency Telephone: (ChemTel) Contract MIS0000335; 800 255-3924; INTL 813 248-0585

Section 2 - Hazards Identification

☆☆☆☆ Emergency Overview ☆☆☆☆

MAY CAUSE EYE AND SKIN IRRITATION. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. MAY BE HARMFUL IF SWALLOWED.

HMIS	
H	2
F	0
R	0
PPE†	
See 8	

Potential Health Effects

Primary Entry Routes: Inhalation, Ingestion

Target Organs: None listed

HAZARDS IDENTIFICATION

Label elements

None

Hazard symbol

None

Signalword

None

Hazard statement

The mixture does not meet the criteria for classification.

Precautionary statement

Prevention

Observe good industrial hygiene practices.

Response

Wash hands after handling.

Storage

Store away from incompatible materials.

Disposal

Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None

Acute Effects

Inhalation: May cause respiratory tract irritation. May cause anoxia, characterized by weakness, headache, dizziness, confusion, cyanosis, weak and irregular heartbeat, collapse, unconsciousness, convulsions, coma and death.

Eye: May cause mild eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Carcinogenicity: IARC, NTP, and OSHA do not list sodium ferrocyanide as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure:

Chronic Effects: unknown

Sodium Ferrocyanide

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	EINECS/ELINCS	% wt or % vol
Sodium Ferrocyanide	14434-22-1	237-081-9	100

Limit values: No limit values have been established for this product for use in the USA and Canada.

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Sodium Ferrocyanide	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

Section 4 - First Aid Measures

Inhalation: Supply fresh air. If required, provide artificial respiration.

Eye Contact: Rinse opened eye for several minutes under running water. Then consult a doctor if irritation persists.

Skin Contact: Immediately wash with water and soap and rinse thoroughly. Seek medical advice if irritation persists.

Ingestion: If material is swallowed, induce vomiting if patient is conscious. Never give anything by mouth to an unconscious person. Seek medical advice.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: Treat symptomatically and supportively.

Section 5 - Fire-Fighting Measures

Flash Point: not applicable

Flash Point Method:

Burning Rate:

Auto-ignition Temperature: not determined

LEL: not determined

UEL: not determined

Flammability Classification: Product is not flammable.

Extinguishing Media: Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

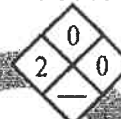
Unusual Fire or Explosion Hazards: none

Hazardous Combustion Products:

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

NFPA



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid raising dust. Eliminate flammables. Eliminate all ignition sources. Dispose contaminated material as waste according to official regulations.

Large Spills

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Water, if necessary with cleansing agents.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Keep container tightly sealed.

Storage Requirements: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs

(Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Sodium Ferrocyanide

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: solid

Appearance and Odor: yellow semi-transparent crystals/odorless

Odor Threshold: not determined

Vapor Pressure: N/A

Vapor Density (Air=1):

Formula Weight: 484.06

Density/Specific Gravity (H₂O=1, at 4 °C): 1.458

pH: N/A

Flash Point: not applicable

Flash Point Method:

Burning Rate: not determined

Auto-ignition Temperature: not determined

Water Solubility: 318.5 g/l @ 20 °C

Other Solubilities: not determined

Boiling Point: N/A

Freezing/Melting Point: N/A

Decomposition Point: 815 °F (435 °C)

Viscosity: not determined

Refractive Index: not determined

Surface Tension: not determined

% Volatile: N/A

Evaporation Rate: N/A

LEL: not determined

UEL: not determined

Section 10 - Stability and Reactivity

Stability: Sodium Ferrocyanide is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Oxidizing agents, ammonia, chromic acid and strong acids.

Conditions to Avoid/Incompatibilities: ACIDS: Evolution of highly toxic and flammable hydrogen cyanide gas. OXIDIZERS (STRONG): Fire and explosion hazard.

Hazardous Decomposition Products: Thermal oxidative decomposition of Sodium Ferrocyanide can produce oxides of nitrogen, carbon monoxide, carbon dioxide and hydrogen cyanide.

Section 11- Toxicological Information

SODIUM FERROCYANIDE:

ADDITIONAL DATA: Because of the strong chemical bond between the cyanide group and the iron, ferrocyanides do not release cyanide under normal conditions. However, certain industrial processes may release hydrogen cyanide which is a chemical asphyxiant.

Toxicity

Oral (rat) LD₅₀: 5100 mg/kg

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE: SODIUM FERROCYANIDE: May cause irritation to the respiratory tract. Ferrocyanides have a low order of toxicity. However, certain industrial processes may release hydrogen cyanide which is a chemical asphyxiant.

CHRONIC EXPOSURE: SODIUM FERROCYANIDE: No data available.

SKIN CONTACT:

ACUTE EXPOSURE:

Sodium Ferrocyanide

SODIUM FERROCYANIDE: May cause irritation.

CHRONIC EXPOSURE:

SODIUM FERROCYANIDE: No specific data available. No dermatitis was reported in workers handling potassium ferrocyanide over a number of years.

EYE CONTACT:

ACUTE EXPOSURE:

SODIUM FERROCYANIDE: Dust may cause irritation.

CHRONIC EXPOSURE:

SODIUM FERROCYANIDE: No data available.

INGESTION:

ACUTE EXPOSURE: SODIUM FERROCYANIDE: The reported probable lethal dose in humans is 0.5-5.0 gm/kg. Ferrocyanide salts are rapidly excreted in urine without metabolic alteration.

CHRONIC EXPOSURE: SODIUM FERROCYANIDE: No data available.

* See NIOSH, *RTECS*, for additional toxicity data.

Section 12 - Ecological Information

Ecotoxicity: data not available.

Environmental Fate: data not available.

Environmental Degradation: data not available.

Soil Absorption/Mobility: data not available.

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Disposal Regulatory Requirements:

Section 14 - Transport Information

Not regulated for transportation

US DOT (49 CFR 172.101):

PSN:
Hazard Class:
UN Number:
Packing Group:

IATA

PSN:
Hazard Class:
UN Number:
Packing Group:

IDG

PSN:
Hazard Class:
UN Number:
Packing Group:

IMDG/IMO

PSN:
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):
Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40):
Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: No
CHRONIC: No
FIRE: No
REACTIVE: No
SUDDEN RELEASE: No

Sodium Ferrocyanide

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated.

STATE REGULATIONS:

California Proposition 65: Not regulated.

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: D2B. Material causing toxic effects (TOXIC): No products were found.

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): Listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

Section 16 - Other Information

Disclaimer: All information, recommendations and suggestions appearing herein are based upon sources believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for its own use of this product. WEGO CHEMICAL GROUP DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE USE BY OTHERS OF THIS PRODUCT.





AMERROC-02

SGUILLEN

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
8/1/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 0C36861 Alliant Insurance Services, Inc. 560 Mission St 6th Fl San Francisco, CA 94105	CONTACT NAME: PHONE (A/C, No, Ext): (415) 946-7500 E-MAIL ADDRESS:	FAX (A/C, No):
	INSURER(S) AFFORDING COVERAGE	
INSURED American Rock Salt Company, LLC P.O. Box 190 Mount Morris, NY 14510	INSURER A : American Zurich Insurance Company	NAIC # 40142
	INSURER B : American Guarantee and Liability Insurance Company	26247
	INSURER C : Zurich American Insurance Company	16535
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:	X		GLO18720707	10/30/2022	10/30/2023	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 10,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> UMBRELLA LIAB OCCUR <input type="checkbox"/> EXCESS LIAB CLAIMS-MADE <input type="checkbox"/> DED RETENTION \$			BAP018720907	10/30/2022	10/30/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC018720607	10/30/2022	10/30/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Cargo			MNG 3500495-22	8/1/2023	10/30/2024	Limit 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 State of West Virginia is named as additional insured per written contract as it relates to general liability in accordance with the terms and conditions of the policy.

CERTIFICATE HOLDER State of West Virginia 1900 Kanawha Blvd. E, Bldg. 5 Room 110 Charleston, WV 25305	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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Broad Form Additional Insured – Blanket – Automatic – Energy – New York

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

Policy No. GLO 0187207-07

Effective Date: 10/30/2022

This endorsement modifies insurance provided under the:

Commercial General Liability Coverage Part

A. Section II – Who Is An Insured is amended to include as an additional insured:

Any person or organization whom you are required to add as an additional insured on this policy under a written contract or written agreement, subject to the following provisions.

- a. Such person or organization is an additional insured only to the extent such coverage is required by written contract or written agreement and only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

- (1) Your acts or omissions; or
- (2) The acts or omissions of those acting on your behalf,

in the performance of your ongoing operations or "your work" as included in the "products-completed operations hazard", which is the subject of the written contract or written agreement; or

- b. Such person or organization is an additional insured only with respect to liability for "bodily injury" to:

- (1) Your "employee"; or
- (2) An employee of a subcontractor acting on your behalf,

but only to the extent:

- (a) Coverage for "bodily injury" to your "employee" or an employee of subcontractors acting on your behalf, regardless of whose fault caused such injury, is required by written contract or written agreement; and
- (b) Such "bodily injury" arises in the performance of your ongoing operations or "your work" as included in the "products-completed operations hazard", which is the subject of the written contract or written agreement.

However, the insurance afforded to such additional insured:

- (i) Only applies to the extent permitted by law; and
- (ii) Will not be broader than that which you are required by the written contract or written agreement to provide for such additional insured.

B. Solely with respect to the insurance afforded to the additional insureds indicated in Paragraph A. of this endorsement, the following additional exclusion applies:

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or the failure to render any professional architectural, engineering or surveying services including:

1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

2. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

C. Solely with respect to this endorsement, the following is added to the **Duties In The Event Of Occurrence, Offense, Claim Or Suit** Condition of Section **IV – Commercial General Liability Conditions**:

The additional insured must see to it that:

- (1) We are notified as soon as practicable of an "occurrence" or offense that may result in a claim;
- (2) We receive written notice of a claim or "suit" as soon as practicable; and
- (3) A request for defense and indemnity of the claim or "suit" will promptly be brought against any policy issued by another insurer under which the additional insured may be an insured in any capacity. This provision does not apply to insurance on which the additional insured is a Named Insured if the written contract or written agreement requires that this coverage be primary and non-contributory.

D. Solely with respect to this endorsement:

1. The following is added to the **Other Insurance** Condition of Section **IV – Commercial General Liability Conditions**:

Primary and Noncontributory insurance

This insurance is primary to and will not seek contribution from any other valid and collectible insurance available to an additional insured provided that:

- (1) The additional insured is a Named Insured under such other valid and collectible insurance; and
- (2) You are required by written contract or written agreement that this insurance be primary and not seek contribution from any other valid and collectible insurance available to the additional insured.

2. The following paragraph is added to Paragraph 4.b. **Excess Insurance** of the **Other Insurance** Condition of Section **IV – Commercial General Liability Conditions**:

This insurance is excess over:

Any of the other valid and collectible insurance, whether primary, excess, contingent or on any other basis, available to an additional insured, in which the additional insured on our policy is also covered as an additional insured on another policy providing coverage for the same "occurrence", offense, claim or "suit". This provision does not apply to any policy in which the additional insured is a Named Insured on such other policy and where our policy is required by a written contract or written agreement to provide coverage to the additional insured on a primary and non-contributory basis.

E. This endorsement does not apply to an additional insured which has been added to this policy by an endorsement showing the additional insured in a Schedule of additional insureds, and which endorsement applies specifically to that identified additional insured.

F. Solely with respect to the insurance afforded to the additional insureds under this endorsement, the following is added to Section **III – Limits Of Insurance**:

The most we will pay on behalf of the additional insured is the amount of insurance:

- a. Required by the written contract or written agreement referenced in Paragraph **A.** of this endorsement; or
 - b. Available under the applicable Limits of Insurance shown in the Declarations,
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

All other terms, conditions, provisions and exclusions of this policy remain the same.

Other Insurance Amendment – Primary And Non-Contributory



Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer No.	Add'l. Prem	Return Prem.
GLO 0187207-07	10/30/2022	10/30/2023		06409000	INCL	

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

Named Insured:

Address (including ZIP Code):

This endorsement modifies insurance provided under the:

Commercial General Liability Coverage Part

1. The following paragraph is added to the Other Insurance Condition of Section IV – Commercial General Liability Conditions:

This insurance is primary insurance to and will not seek contribution from any other insurance available to an additional insured under this policy provided that:

- a. The additional insured is a Named Insured under such other insurance; and
- b. You are required by a written contract or written agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

2. The following paragraph is added to Paragraph 4.b. of the Other Insurance Condition of Section IV – Commercial General Liability Conditions:

This insurance is excess over:

Any of the other insurance, whether primary, excess, contingent or on any other basis, available to an additional insured, in which the additional insured on our policy is also covered as an additional insured on another policy providing coverage for the same "occurrence", offense, claim or "suit". This provision does not apply to any policy in which the additional insured is a Named Insured on such other policy and where our policy is required by written contract or written agreement to provide coverage to the additional insured on a primary and non-contributory basis.

All other terms and conditions of this policy remain unchanged.

POLICY NUMBER: GLO 0187207-07

COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:

BLANKET AS REQUIRED BY WRITTEN CONTRACT.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – **Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.