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#### Addendum # 1 New Brine Well

Date of Addendum: 2/14/25

#### NOTICE TO ALL BIDDERS AND PLANHOLDERS

The Bid Documents for the above-referenced Project are modified as set forth in this Addendum. The original Bid Documents and any previously issued addenda remain in full force and effect, except as modified by this Addendum, which is hereby made part of the Bid Documents. Vendors will take this Addendum into consideration when preparing and submitting a bid, and shall acknowledge receipt of this Addendum in the space provided in the Bid Documents.

#### **BID SUBMITTAL DEADLINE**

The bid submittal time has not been changed.

1.0 - ATTACHMENTS		
Item	Description	
1.1	Henderson Products – Brine Extreme Infinity Advantage 2019	

2.0 – QUESTIONS AND ANSWERS						
The following questions and answers are provided as a matter of information to clarify issues raised about the Bid						
Docun	Documents.					
Item	Questions and Answers					
2.1	Q. Assuming the well goes to the west of the culvert storage as discussed during the meeting, can you confirm if we should include the ~100' of discharge piping in our proposal? I would assume the saw cut (and maybe excavation?) would be done by the County. The discharge piping would consist of 3" DR 11 fused HDPE pipe and fittings from the pitless to the building. In the trench, we would also run an 1-1/4" continuous conduit as well between the well and the VFD. We would come through the wall of the building for connection to interior piping, and the piping outside of the building will be covered with a fabricated, insulated stainless steel hotbox to keep it from freezing in the wintertime.  A. Yes, the county would handle saw cutting the asphalt and removing it, as well as digging the trench. The Successful Vendor will need to include the discharge piping as part of their proposal.					
2.2	<ul> <li>Q. Please provide the flow and pressure requirements of the brine maker for consideration in verifying the pump sizing is correct. Can you verify if a solenoid valve will be fixed to the brinemaker? I'm assuming the brine maker will turn "on" and "off" somehow?</li> <li>A. The County has purchased the Advantage Pro model, which is on page 4/5 of the attachment, shows a 6,000 gph or 100 gpm output. We will verify with the company to see if a solenoid valve will be fixed to the brine maker. The brine maker will turn off automatically once it has completed the programed task or if salt needs to be added, water flow in/out is controlled by the control panel mounted on the brine maker itself, page 6 of the attachment, Pro Controls. If it senses a fault or a malfunction it will power down and stop all production until the issue has been resolved.</li> </ul>					
2.3	<ul><li>Q. If the County would like to use the well to fill trucks with "fresh" water, it is recommended a flow restrictor be installed to ensure that the well pump operates on its curve.</li><li>A. The County will install a flow restrictor into the 3" line that we will be using for fresh water.</li></ul>					

Q. Note that it is recommended that a NEMA 3R drive be used for this effort.

A. NEMA 3R Drive is required.

### END OF ADDENDUM



# **Brine treme**











MANUAL (SEE SPECS BELOW)

AVAILABLE CONTROLS
PRO OR ULTIMATE

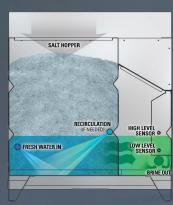
GALLONS/HOUR OUTPUT

UP TO 6,000 (PRO) / 7,500 (ULTIMATE)

HOPPER WIDTH

HOPPER CAPACITY
4.67 CU. YD.





Undissolved solids are removed through the large opening.

Cross-flow brine transfer for splashfree performance.





## BRINEXTREME® SYSTEM SALINITY CONTROLS

### **ULTIMATE CONTROLS**

**CAPABILITIES** 

BRINE PLUS BLEND UP TO 3 ADDITIVES, 3 MICRO INGREDIENTS & FILL 3 TRUCKS SIMULTANEOUSLY

SALINITY CONTROL

AUTOMATED/23.3%

ACCURACY

+/- 0.01 SPECIFIC GRAVITY

OUTPUT

UP TO 7,500 GPH

TRUCK FILL RATE



### **PRO** CONTROLS

CAPABILITIES

BASIC BRINE

Add Truck Fill Station to blend up to 3 products/fill trucks

SALINITY CONTROL

AUTOMATED/23.3%

ACCURACY

+/- 0.01 SPECIFIC GRAVITY

OUTPUT

UP TO 6,000 GPH

FLOW RATE

**UP TO 100 GPM** 



#### **ULTIMATE CONTROLS**

Up to 3 Truck Fill Stations can

be used

#### **PRO CONTROLS**

Handles All Salt (Treated/Untreated)	Yes	Yes
Motor Drive	Variable Speed	On / Off
Brine Measurement	Density	Density
Accuracy	+/- 0.01 SG	+/- 0.01 SG
Salinity Control	100% Automated	100% Automated
Brine Making Volume Measurement	Solid State Flow Meter	Open Loop
LED Touch Screen	10.4"	5.8"
Data Logging	Yes	Yes
Storage Tank Level Monitoting	Yes	Yes
Built-in Self Diagnostics	Yes	Yes
Cellular Remote Access	Included First Year Optional After 1 Year	Optional
Controls Cabinet Weatherproofing	NEMA 4X	NEMA 4X
UL Listed	Yes	Yes
Pump Design	Pedestal / Cast Stainless	Pedestal / Cast Stainless
Valves	Pneumatic Diaphragm	Electric Ball (24v DC)
Pump Motor	3.5, 5 & 7.5 HP	3 HP
Voltage/Phase	220v Single Phase or 208/480/525 Three Phase	220v Single Phase
System Expandable	Yes	No



## BRINEXTREME® MOBILE BRINE UNIT



CAPABILITIES
BASIC BRINE
Add Truck Fill Station to blend up to 3 products/fill trucks

BRINE PRODUCTION
CONTINUOUS/AUTOMATED

CLEANOUT

CONTINUOUS/AUTOMATED

SALINITY CONTROL AUTOMATED

OUTPUT

UP TO 6,000 (PRO Controls)

## BRINEXTREME® TRUCK FILLING & BLENDING

#### **ULTIMATE CONTROLS**

BrineXtreme® Ultimate is a premium industrial grade stand-alone modular controls system offering reliable, accurate and expandable brine production. The Ultimate works effortlessly with up to 5 products (calcium chloride, magnesium chloride, beet juice, etc...) when coupled to the Infinity, or 3 products when coupled to the Advantage; and 3 micro ingredients (dyes, anti-foam solutions, etc...) to produce custom salt brine mixtures.

All brine management tasks are handled including: data logging, remote access, password protection, multiple user setup and more. BrineXtreme® consistently

delivers the optimum mixture of 23.3% salt concentration by weight at any temperature. This precise concentration allows the brine to perform in temperatures down to -6°F (-21°C). Accurate salinity control eliminates excessive salt waste.



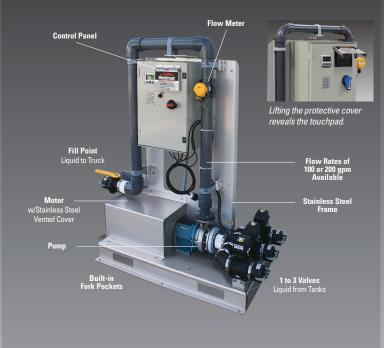
Up to 3 Truck Fill Stations can be used



#### TRUCK FILL STATION

BrineXtreme® Truck Fill Station is an advanced stand-alone filling station designed as a companion product for the BrineXtreme® Pro controls.

The Truck Fill Station handles many brine management tasks with features like: plug-n-play installation, blending up to 3 products, data logging, remote access, password protection, multiple user setup and more. And with its modular design and intuitive controls, the Truck Fill Station makes a perfect addition for basic brine handling tasks.



#### **ULTIMATE CONTROLS** TRUCK FILL STATION

Fully Automatic Blend & Truck Fill	Yes	Yes
Blending Method	Real Time Based on Flow Rate	Stack Based on Volume
Max. No. Truck Fill Points	3	1
Max No. Products to Blend to Truck	5	3
Tank Level Monitor	1 per Product Pump	None
Truck Fill Flow Rate Measurement	Solid State Flow Meter	Solid State Flow Meter
Micro Ingredient	Up to 3	_
Valve Type	Pneumatic Diaphragm	Electric Ball Valve
Truck Fill Blending Flow Rate GPM at 50' TDH and Sg. of 1.2	100, 200, 300 & 400	100 or 200
Number of Pumps	Up to 5	1
Pump Construction	Pedestal / Cast Stainless Steel	Pedestal / Cast Stainless Steel
Pump Motor Control	Variable Speed	On / Off
Motor HP	3, 5, 7.5 & 10	3 or 5
Touch Screen	10.4"	5"
Remote Access/Cell Gateway	Standard	Optional
Data Logging	Yes	Yes
Voltage/Phase	220v Single Phase or 208/480/525 Three Phase	220v Single Phase
Dimensions	147"W x 65"H x 27"D	61"W x 68"H x 29"D

BrineXtreme system design and components are covered under patent numbers: 13/656412, 14/286706, 14/025177, 62/662546, & 10544340.

<sup>©</sup> Henderson Products, Inc., A division of Douglas Dynamics, LL.C., reserves the right in pursuit of continuous product improvement to change specifications used herein. As a custom manufacturer of truck bodies, truck equipment and brine systems, additional product options may be available that are not shown here.



