

# OREGON STATE UNIVERSITY REQUEST FOR QUOTE (RFQ)

						ISSUE DATE:		December 2, 2011				
RFQ #		DL157494Q			RFQ DUE DAT	December 9, 2011, 10 AM						
DELIVER T				0:				REQUESTED BY / RETURN QUOTE TO:				
<b>DEPARTMENT:</b> Facilities Services					NAME:		Debora Lauer					
ADDRESS: OSU Nas			sh Hall			E-MAIL:	Debora.Lauer@oregonstate.edu					
CITY,	STATE ZIP:	Corvallis, OR 97331				<b>TELEPHONE:</b> 541-737-7343						
REQUIRED DELIVERY DATE: March 16			5, 2012 <b>FAX</b> :				541-737-2170					
ITEM DESCRIPTION						Q	TΥ	UNIT	UNIT PRICE	TOTAL PRICE		
1	Reverse Osn	ter System				1		Lot				
	SYSTEM SPECIFICATIONS ATTACHED											
	OSU WILL INSTALL THE SYSTEM											
	SHIPPING MUST BE INCLUDED											
Delivery is f.o.b. destination, prepaid an must be included in quoted prices. Add												
DELIVERY TIME AFTER RECEIPT OF ORDE				R:			P	PRICES VALID THROUGH:				
SPECIAL INSTRUCTIONS:				VENDC				DR INFORMATION:				
1. Unless otherwise specified, all items quoted are to be new, unused and not remanufactured in any				COMPANY:								
way. 2. Brand names are for the purpose of describing				ADDRESS:								
and establishing the characteristics desired and are not intended to limit or restrict competition. Quoters may submit quotes for substantially equivalent products unless the RFQ provides that				CITY, STATE, ZIP:								
				CONTACT NAME:								
a spe	cific brand is ibility requireme	necessary	E-MAIL:									
substitutions shall be subject to approval by OSU. 3. Quoters must clearly identify all products				TELEPHONE:								
quoted. Brand name and model or number must be shown.				FAX:								
<ol> <li>Only serve to</li> </ol>	documents iss change the RF U reserves the r	Q in any way.	VENDOR SIGNATURE: By signature below the undersigned certifies that they are authorized to act on behalf of the quoter and will comply with all aspects of the quote herein.									
item, partial or whole lots, groups of items or entire quote, whichever is in the best interest of OSU.			SIGNATURE:									
<ol><li>OSU may reject any Quote not in compliance with the RFQ, attachments, and addenda, or if it is in the best interest of OSU.</li></ol>				NAME/T	ITLE:							

This procurement is subject to the indicated Oregon State University Standard Terms and Conditions for: Goods Services Purchase Order Construction Software. The indicated terms and conditions may be viewed at <a href="http://pacs.oregonstate.edu/terms-and-conditions">http://pacs.oregonstate.edu/terms-and-conditions</a>

## Project#: 1296-12

Description: Reverse Osmosis / DI System (NASH)

# Control System:

Standard voltage: 480 Volt, 3 Phase, 60 Hertz, 10 Amps UL 508 A control panel label Fiberglass Nema Enclosure Touchscreen controls / Alarm identification screen PLC control system Digital resistivity meter 2 cell (RO quality / DI quality) Low quality alarm tied into the PLC control system High level protection tied into the PLC control system Low level protection tied into the PLC control system 110 Volt outlets to supply power to resistivity indicator light

## **REVERSE OSMOSIS COMPONENTS: 4+ GPM (Expandable to 9 GPM)**

Steel frame / powder coated: Sized to fit thru a 36" door way
1.5 stainless steel multistage pump: Grundfos CRI3-9
Low pressure pump shut-off switch (adjustable)
2.5" x 20" filter housing with differential pressure gauges
Stainless steel control panel
Pre-filter and post-filter pressure gauges: 4 Panel Mount Gauges
3 Hi-flux stainless steel reverse osmosis housings
3 reverse osmosis elements
Stainless steel needle valves
Feed, and concentrate flow meters 3 each (0 - 10 gpm)
Feed and concentration pressure gauges

## **DI WATER RECIRCULATING SYSTEM: 8 GPM**

Steel frame / powder coated: Sized to fit thru a 36" door way .5 HP stainless steel multistage pump: Grundfos Ball valve between pump and tank (simplify pump repair / replacement) Back-pressure regulator valve: Pump protect from clogged filter Back-pressure regulator valve: By-pass into the tank 2.5" x 20" filter housing with differential pressure gauges (Pre-DI) 2.5" x 20" filter housing with differential pressure gauges (Post-DI) Resistivity indicator light for (1st Mixed Bed Tank) Plumbing material (PVC schedule 80 and Polyethylene tubing) High pressure DI compatible hose for DI tanks

#### TANK AND ACCESSORIES:

(2) 300 gallon tank: 36" x 78" (Size may vary)
Bulk head fittings for tank penetrations
.5" polypropylene float switches
2.5" x 10" clear filter housing (1 micron to pre-filter air)
Connection plumbing to cycle water through both tanks

# SPILL CONTAINMENT HIGH LEVEL AND ALARM SYSTEM PACKAGE:

Polypropylene spill containment tray: Welded on sight Float switch located in spill tray tied to PLC controls 1" Actuactor valve tied to high level alarm (shut-off supply water)

# ULTRAVIOLET LAMP ASSEMBLY

6 GPM unit Stainless steel construction Pre-installed and integrated into the DI delivery system

## **DIGTIAL CHART RECORDER (6 Inputs to record events)**

Chart RO quality Chart DI quality Ethernet connect on status of water quality (Remote Location) \* Remote viewing from PC with propritiery softener (6 Data Points)

# **INCOMING WATER STORAGE TANK W/BOOSTER PUMP**

300 gallon storage tank
Variable frequency pump to boost pressure
Ball valve between pump and tank (simplify pump repair / replacement)
1" Make-up solenoid valve
2.5" x 20" Pre-filter (with differential pressure gauges)

