S**ENGINEERING CHANGE NOTICE**Page 1 of 21. ECN **658746**Proj.
ECN

2. ECN Category (mark one) Supplemental ☐ Direct Revision ☒ Change ECN ☐ Temporary ☐ Standby ☐ Supersedure ☐ Cancel/Void ☐	3. Originator's Name, Organization, MSIN, and Telephone No. TA Nuxall, CVDF, R3-86, 372- 3739		4. USQ Required? ☒ Yes ☐ No	5. Date 3/23/00
	6. Project Title/No./Work Order No. W-441 Spent Nuclear Fuel Cold Vacuum Drying		7. Bldg./Sys./Fac. No. 142-K	8. Approval Designator SNQ
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) SNF-3929, Rev. 4		10. Related ECN No(s). N/A	11. Related PO No. N/A
12a. Modification Work ☐ Yes (fill out Blk. 12b) ☒ No (NA Blks. 12b, 12c, 12d)	12b. Work Package No. N/A	12c. Modification Work Complete N/A Design Authority/Cog. Engineer Signature & Date	12d. Restored to Original Condition (Temp. or Standby ECN only) N/A Design Authority/Cog. Engineer Signature & Date	
13a. Description of Change Addition of Reotemp Pressure Gauges. 13b. Design Baseline Document? ☐ Yes ☒ No SCH - SC ^{5/15/00} USQ: CVD-00-0293 ^{5/15/00}				
14a. Justification (mark one) Criteria Change ☒ Design Improvement ☐ Environmental ☐ Facility Deactivation ☐ As-Found ☐ Facilitate Const ☐ Const. Error/Omission ☐ Design Error/Omission ☐				
14b. Justification Details Due to changes in pressure. The design verification method for SS/SC components is by independent review in accordance with EN-6-027-01. Documentation of this review is accomplished by the independent reviewer approval signature on page 2 of this ECN.				
15. Distribution (include name, MSIN, and no. of copies) See attached distribution.			RELEASE STAMP DATE: STA: 4 MAY 15 2000 HANFORD RELEASE ID: 2	

ENGINEERING CHANGE NOTICE

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1. ECN (use no. from pg. 1)

658746

16. Design Verification Required

[X] Yes
[] No

17. Cost Impact

ENGINEERING

N/A

CONSTRUCTION

Additional

[]

\$

Additional

[]

\$

Savings

[]

\$

Savings

[]

\$

18. Schedule Impact (days)

N/A

Improvement

[]

Delay

[]

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision

Document Number/Revision

Document Number Revision

N/A

21. Approvals

	Signature	Date		Signature	Date
Design Authority	C. Miska	5/11/00	Design Agent		
Designated Cog. Eng.	C. Van Katwijk	3/23/00	PE		
Authorized Rep. Mgr.	T. Choho	3/23/00	QA		
QA	R. Ramsgate	3-23-00	Safety		
Safety	J. Brehm	5/15/00	Design		
Independent Reviewer	S. Parker	5-15-00	Environ.		
			Other		

* C. Haller

* Approval authorized parallel preparation of USQ Screen with implementation of ECN per NSQ-02.
JB for C.S. Haller

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL

CONCOA SCHe Pressure Regulator & Reotemp Pressure Gauges (SCHe Tank Outlet)

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford
P.O. Box 1000
Richland, Washington

SNF-3929
Revision 5

ECW-658746

CONCOA SCHe Pressure Regulator & Reotemp Pressure Gauges (SCHe Tank Outlet)

Carl Van Katwijk
Fluor Hanford, Inc.

Date Published
March 2000

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford

P.O. Box 1000
Richland, Washington

Release Approval

5/15/00
Date

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Printed in the United States of America

SNF-3929, rev 5

124 pages.

Commercial Grade Item Upgrade Dedication Form		SNF-3929, Rev. 5
ECN No. NA	CGI No. CGI-SNF-D-13-P5-032	Page 1 of 11
Title: Concoa SCHe Pressure Regulators & Reotemp Press. Gauge (SCHe Tank Outlet)		

Section 1d Part Information			
Item No.: N/A		Manufacturer: N/A	
Mfg. Part/Model No.: N/A		Supplier: N/A	
Part Description: N/A			
End Use Description: N/A			
Section 2a Component Information			
Equipment No.: SCHe-PCV-5*04, 5*23, 5*43, 5*63; PI-5*02, 5*21, 5*41, 5*61	Specification No.: SNF-5304, Rev. 0 (W-441-P5, Rev. 3)	Manufacturer: Concoa, Reotemp	Past P.O. No.: N/A
Procurement and/or Model No.: Concoa: 412-2800-01-XA; Reotemp: PR-25-S-1-A-4-P34-D	Equipment Supplier (if different from manufacturer): TBD		Equip. Supplier's Part No.: N/A
Component Description: Dual Stage Pressure Regulator to Maintain Steady Delivery Pressure Over Wide Range of He Tank Pressure. Pressure Gauges give Indication of Purge Line Pressure.			
Section 2b Commercial Availability of the Item			
<p>1. Is the Item available from a catalogue from a qualified NQA1 supplier or ISO 9000 supplier (coordinate with project CGI interface Engineer or BTR)? ☐ YES (go to #2 below) ☒ NO (go to procedure step 6.3.2, proceed to dedicate Item)</p> <p>If not available from a qualified NQA1 supplier, is it available from an ISO 9000 supplier? (coordinate w/ project CGI Interface Engineer or BTR):</p> <p>☐ YES (go to #2 below, procedure step 6.3.2, dedicate Item) ☒ NO (procedure step 6.3.2, dedicate Item)</p>			
2. List of Candidate qualified suppliers or ISO 9000 suppliers: N/A			
3. Recommended Procurement Strategy (coordinate with project CGI interface Engineer or BTR): N/A			
Section 2c CGI Determination			
CGI Determination Questions:			
#1: Is the Item subject to design or specification requirements that are unique to nuclear facilities or activities?			
☐ YES (the Item is not commercial grade) ☒ NO (continue)			
#2: Is the Item used in applications other than nuclear facilities or activities?			
☐ NO (the item is not commercial grade) ☒ YES (continue)			
#3: Is the Item ordered from manufacturer/supplier on the basis of specifications set forth in the manufacturer's catalog?			
☐ NO (the item is not commercial grade) ☒ YES (continue)			
☒ All three criteria have been satisfied. The Item meets the definition of commercial grade.			
Section 2d Reason for Dedication			
The above Commercial Grade (CG) described Item is being Dedicated for use in the application cited for the following reason(s):			
☒	Item is being purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Class application.		
☐	Item is being purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Significant application.		
☐	Item was purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Class application.		
☐	Item was purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Significant application.		
☐	Other ('like-for-like', similar, substitution, replacement evaluation)		

Commercial Grade Item Upgrade Dedication Form		SNF-3929, Rev. 5
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Title: Concoa SCHe Pressure Regulators & Reotemp Press. Gauge (SCHe Tank Outlet)		

Section 3 Failure Effects Evaluation		
A. Part/Component Safety Function:		
1. Pressure boundary.		
2. Prevent Thermal Runaway and H2 explosion .		
3. Maintain critical function before and after seismic event.		
B. Part/Component Functional Mode:		
Safety Function #1: ☐ Active ☒ Passive	Active - Mechanical or Electrical change of state is required to occur for the component to perform its safety function	
Safety Function #2: ☐ Active ☒ Passive	Passive - Change of state is not required for the component to perform its safety function	
Safety Function #3: ☐ Active ☒ Passive		
C. Host Component Safety Function (if applicable): N/A		
1.		
D. Failure Mode(s) and the effects on component or system safety function (see Worksheet 1):		
1. Valve Body/Process Connection break - loss of boundary, air in-leakage.		
2. Diaphragm/Body Failure - loss of regulating function.		
Section 4 Environmental & Natural Phenomena Hazard Design		
Environmental Qualification Required:		If yes: Environmental Qualification Requirements
Yes ☐		Limiting Environmental Conditions:
No ☒ Environmental Condition B		Required Safety Functions:
		Qualification Period:
Natural Phenomena Hazard (NPH) Design Required:		If yes: NPH Design Requirements
Yes ☒		Performance Category: PC-3
No ☐		NPH Design Req'ts.: Seismic Condition A
HNF-PRO-97, Rev. 0		Required Safety Functions: Maintain Pressure Boundary, Prevent Thermal Runaway and H2 Explosion, Maintain Critical Function Before and After Seismic Event
W-441-P5, Rev. 3		
Section 5 Component Functional Classification		
☒ Safety Class (SC)	☐ General Service (GS)	☐ Safety Significant (SS)
If part/component classification is different from host component/system, document basis. N/A		
Sections 6 and 7 (Reserved)		
Section 8 References (for Functional Classification)		
National Codes/Standards: ASME B31.3		
Safety Analysis Report (SAR): HNF- 3553, Rev. 0A, Annex B		
Drawings: H-1-82165, Rev. 2, HNF-SD-SNF-SEL-002, Rev. 7		
Vendor Manual/Manufacturer/Supplier Information: Catalog Cut Sheets: Concoa 412 Series Regulator, Reotemp Pressure Gauges		

Commercial Grade Item Upgrade Dedication Form		SNF-3929, Rev. 5
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Title: Concoa SCHe Pressure Regulators & Reotemp Press. Gauge (SCHe Tank Outlet)		

Section 3: Critical Characteristics				
Critical Characteristics	Acceptance Criteria/Tolerances	Acc. Method	ID	Function
Concoa Pressure Regulator:				
1. Item Identification Critical Characteristics (necessary for reasonable assurance that the Item delivered is the Item specified)				
Nameplate - Manufacturer	Concoa	1, IN	X	
Regulator Component Number-Procurement and/or Model Number	412-2800-01-XA , (Per Procurement Package W-441-P5, Rev. 3, Design Data Sheet)	1, IN	X	
Relief Valve Manufacturer/Model No. (furnished with regulator)	Concoa / 534-2922-50, (ditto above)	1, IN	X	
Pigtail Manufacturer/Model No. / Connection Size / Length (furnished with regulator)	Concoa / 529-0058-680 / 1/4" MNPT / 3', (ditto above)	1, IN	X	
Panel Mount Kit Manufacturer/Model No. (furnished with regulator)	Concoa / 550-0002, (ditto above)	1, IN	X	
Helium Leak Certification (supplied with regulator)	Documentation of leakage < 1 X 10 ⁻⁸ scc/sec, (ditto above)	1, IN	X	
2. Physical Critical Characteristics (for reasonable assurance that the Item delivered is the Item specified)				
Regulator Body Material	Brass (Note 4)	1, IN, 1, T	X	X
Regulator Outlet Connection	1/4" NPT Male	1, IN	X	
3. Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))				
Setpoint	Maintain delivery pressure of 25 psig over input pressure range of 100 to 3000 psig	1, T		X
Concoa Relief Valve Setpoint (adjust to 50 psig as necessary)	± 5 psig	1, T		X
Reotemp Pressure Gauges:				
1. Item Identification Critical Characteristics (necessary for reasonable assurance that the Item delivered is the Item specified)				
Nameplate - Manufacturer	Reotemp	1, IN	X	
Component Number-Procurement and/or Model Number	PR-25-S-1-A-4-P34-D	1, IN	X	
2. Physical Critical Characteristics (for reasonable assurance that the Item delivered is the Item specified)				
Dial Size	2.5" Diameter Nominal	1, IN	X	
Outlet Connection	1/4" NPT	1, IN	X	
Mounting	Bottom Mounting	1, IN	X	
Tube & Socket Material	316 SS	1, IN, 1, T	X	X
Pressure Range	0-5000 psig	1, IN	X	
3. Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))				
Accuracy	Certification of Calibration shows accuracy at least 1.6% of Full Scale per the documentation.	1, T		X
All Items:				
3. Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))				
Pressure Boundary	Pressure Test at 4400 psig for >10 minutes; Reduce pressure to 4000 psig, perform snoop test (No Leakage-No Bubbles) Note 3	1, T		X
Environmental	Note 1			
Seismic Condition A	Note 2	1, T		X

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Worksheet 1 - Determination of Failure Mechanisms

Section 1			
Typical Failure Mechanisms	Definition	X = Applicable to Component under Evaluation	
		X?	Indicate Failure Mode
Fracture	Separation of a solid accompanied by little or no macroscopic plastic deformation.		
Corrosion	The gradual deterioration of a material due to chemical or electrochemical reactions, such as oxidation, between the material and its environment.		
Erosion	Destruction of materials by the abrasive action of moving fluids, usually accelerated by the presence of solid particles carried with the fluid.		
Open Circuit	An electrical circuit that is unintentionally broken so that there is no complete path for current flow.		
Short Circuit	An abnormal connection by which an electrical current is connected to ground, or to some conducting body, resulting in excessive current flow.		
Blockage	Clogging of a filtering medium resulting in the inability to perform its purification function or blockage of flow.		
Seizure	Binding of a normally moving item through excessive pressure, temperature, friction, jamming.		
Unacceptable Vibration	Mechanical oscillations produced are beyond the defined permissible limits due to unbalancing, poor support, or rotation at critical speeds.		
Loss of Properties	A loss of mechanical and physical properties of a material due to exposure to high temperatures, radiation exposure.		
Excess Strain	Under the action of excessive external forces the material of the part has been deformed or distorted.		
Mechanical Creep	From prolonged exposure to high temperature and stress, the object will show a slow change in its physical (shape and dimension) and mechanical characteristics.		
Ductile Fracture	Fracture characterized by tearing of metal accompanied by appreciable gross plastic deformation.		
Section 2 Additional Failure Modes Applicable to the Component Under Evaluation			
1. Regulator, Hose or Gauge Body Break			
2. Diaphragm Break/Failure			

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Title: Concoa SCHe Pressure Regulators & Reotemp Press. Gauge (SCHe Tank Outlet)		

Checklist 1 - Acceptance Method 1 - Special Test/Inspection Verification

SECTION 1	
Item Description: SCHe Tank Pressure Regulator and associated equipment System #: 13	Equip #: SCHe-PCV-5*05, 5*23, 5*43, 5*63; PI-5*02, 5*21, 5*41, 5*61 Procurement and/or Model #: Concoa: 412-2800-01-XA; Reotemp: PR-25-S-1-A-4-P34-D
Manufacturer (Address/Phone): Concoa 1502 Harpers Road Virginia Beach, VA 23454 800-225-0473 Fx: 757-422-3125 e-mail@concoa.com	Supplier (Address/Phone): Reotemp 11568 Sorrento Valley Road, Suite 10 San Diego, CA 92121 USA Toll-Free: (800) 648-7737 Phone: (619) 481-7737 Fax: (619) 481-7415 Email: reotemp@reotemp.com

SECTION 2 CRITICAL CHARACTERISTICS TO BE VERIFIED BY METHOD 1			
Insp	Test	Post-Test	
X			1. Nameplate - Manufacturer
X			2. Component Number-Procurement and/or Model Number
X			3. Body Material (Verification may be by either inspection or test)
X			4. Outlet Connection
X			5. Relief Valve Manufacturer/Model No.
X			6. Pigtail Manufacturer/Model No. / Connection Size / Length
X			7. Panel Mount Kit Manufacturer/Model No.
X			8. Helium Leak Certification
X			9. Dial Size
X			10. Mounting
X			11. Pressure Range
	X		12. Pressure Boundary
	X		13. Setpoint
	X		14. Relief Valve Setpoint
	X		15. Seismic Condition A
	X		16. Accuracy

SECTION 3 BY INSPECTION * See Attachment H, Table H-1 of Desk Instruction for Sampling Size References (See Section 7)	
Concoa Pressure Regulator:	
Characteristic: Manufacturer	Sample Size*: 100%
Acceptance Criteria: Concoa	Receipt Inspection Plan / Report #:
Characteristic: Component Number-Procurement and/or Model Number	Sample Size*: 100%
Acceptance Criteria: 412-2800-01-XA (Per Procurement Package W-441-P5, Rev. 3, Design Data Sheet	
Receipt Inspection Plan / Report #:	
Characteristic: Body Material	Sample Size*: 100%
Acceptance Criteria: Brass	Receipt Inspection Plan / Report #:

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Characteristic: Outlet Connection	Sample Size*: 100%
Acceptance Criteria: 1/4" NPT Male	Receipt Inspection Plan / Report #:
Characteristic: Relief Valve Manufacturer/Model No (supplied with regulator)	Sample Size*: 100%
Acceptance Criteria: Concoa / 534-2922-50	Receipt Inspection Plan / Report #:
Characteristic: Pigtail Manufacturer/Model No. / Connection Size / Length (supplied with regulator)	Sample Size*: 100%
Acceptance Criteria: Concoa / 529-0058-680 / 1/4" MNPT / 3'	
Receipt Inspection Plan / Report #:	
Characteristic: Panel Mount Kit Manufacturer/Model No. (supplied with regulator)	Sample Size*: 100%
Acceptance Criteria: Concoa / 550-0002	Receipt Inspection Plan / Report #:
Characteristic: Helium Leak Certification (supplied with regulator)	Sample Size*: 100%
Acceptance Criteria: < 1 X 10⁻⁸ scc/sec	Receipt Inspection Plan / Report #:
Reotemp Pressure Gauge:	
Characteristic: Manufacturer	Sample Size*: 100%
Acceptance Criteria: Reotemp	Receipt Inspection Plan / Report #:
Characteristic: Component Number-Procurement and/or Model Number	Sample Size*: 100%
Acceptance Criteria: PR-25-S-1-A-4-P34-D	Receipt Inspection Plan / Report #:
Characteristic: Dial size	Sample Size*: 100%
Acceptance Criteria: 2.5" Diameter Nominal	Receipt Inspection Plan / Report #:
Characteristic: Outlet Connection	Sample Size*: 100%
Acceptance Criteria: 1/4" NPT	Receipt Inspection Plan / Report #:
Characteristic: Mounting	Sample Size*: 100%
Acceptance Criteria: Bottom Mounting	Receipt Inspection Plan / Report #:
Characteristic: Tube & Socket Material	Sample Size*: 100%
Acceptance Criteria: 1/4" NPT	Receipt Inspection Plan / Report #:
Characteristic: Pressure Range	Sample Size*: 100%
Acceptance Criteria: 0-5000 psig	Receipt Inspection Plan / Report #:
Characteristic: Accuracy	Sample Size*: 100%
Acceptance Criteria: Certificate of Calibration by manufacturer show accuracy to be at least 1.6% of full scale	
Receipt Inspection Plan / Report #:	

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Section 4 By Special Test - See Attachment 1, Table 1-1 of Desk Instruction for Sampling Size References (See Section 7)	
Characteristic for Test: Pressure Boundary Acceptance Criteria: Pressure Test at 4400 psig for >10 minutes; Reduce Pressure to 4000, perform snoop test (No Leakage-No Bubbles) Actual Test Value:	Samp Size*: ☒ Normal[]Reduced[]Tightened Test Plan and Report #:
Characteristic for Test: Setpoint Acceptance Criteria: Maintain delivery pressure of 25 psig over input pressure range of 100 to 3600 psig. No Pressure increase above setpoint (with zero flow) for 96 hours. Actual Test Value:	Samp Size*: ☒ Normal[]Reduced[]Tightened Test Plan and Report #:
Characteristic for Test: Relief Valve Setpoint Acceptance Criteria: ± 5 psig Actual Test Value:	Samp Size*: ☒ Normal[]Reduced[]Tightened Test Plan and Report #:
Characteristic for Test: Seismic Condition A Acceptance Criteria: Maintain critical function before and after seismic event Sample Size*: W-441-P5, Rev. 2, Appendix I, page I-2, provides the seismic testing plan for these components. The seismic testing is conducted for one complete panel with the components assembled on the panel and tested as a complete assembly. The test seismically qualifies the entire assembly, including mountings, piping, and components. The number of components tested is dictated by the panel assembly design. Actual Test Value:	Samp Size*: []Normal[]Reduced[]Tightened Test Plan and Report #:

**If Supplier/Manufacturer or Other, Refer to CGI Checklist-2 for Support Information

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Section 5 Test / Inspection Summary (Acceptance Method 1)

1. Summary of Verified Critical Characteristics, Their Verification Methods, and Results

ITEM DESCRIPTION: Regulator											
Critical Characteristics					Verification Results						
Critical Characteristics	Acceptance Criteria/Tolerances	ID	Function	Method T/I/N	Procedure or R/R#	Checklist ID	Number Tested	Number Failed	Verifying Organization	Printed Name Signature	Date
Nameplate - Manufacturer	Concoa	X		1, IN							
Model Number	412-2800-01-XA, (Per Procurement Pkg W-441-P5, Rev. 3, Design Data Sheet)	X		1, IN							
Body Material	Brass	X		1, IN							
Outlet Connection	1/4" NPT Male	X		1, IN							
Relief Valve Mfr / Model No.	Concoa / 534-2922-50, (Ditto above)	X		1, IN							
Pigtail Mfr/Model No. / Connection Size / Length	Concoa / 529-0058-680 / 1/4" MNPT / 3', (ditto above)	X		1, IN							
Panel Mount Kit Model No.	Concoa / 550-0002, (ditto above)	X		1, IN							
Pressure Boundary	Pressure Test at 4400 psig for >10 min; Reduce to 4000, perform snoop test (No Leakage-No Bubbles)		X	1, T							
Setpoint	Maintain delivery pressure of 25 psig over input pressure range of 100 to 3600 psig		X	1, T							
Concoa Relief Valve Setpoint (adjust to 50 psig as necessary)	+ 5 psig		X	1, T							
Seismic Condition A	Maintain Critical Function Before and After Seismic Event.		X	1, T							

2. Disposition of Unverified or Failed Critical Characteristics									
Critical Characteristic					Disposition				

3. Signature Indicates All Critical Characteristics Verified Satisfactory or Acceptably Dispositioned and Commercial Grade Dedication is Satisfactory and Complete.

Testing Agency Approval: _____	Design Authority: _____	Date: _____
Testing Agency QA Engineer: _____	QA Engineer: _____	Date: _____
BUYER VERIFICATION		

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Title: <u>Concoa SCHe Pressure Regulators & Reotemp Press. Gauge (SCHe Tank Outlet)</u>		

Section 5: Test / Inspection Summary (Acceptance Method 1)

1. Summary of Verified Critical Characteristics, Their Verification Methods, and Results

ITEM DESCRIPTION: Pressure Gauge											
Critical Characteristics					Verification Results						
Critical Characteristics	Acceptance Criteria/Tolerances	ID	Function	Method T/IN	Procedure or RR#	Check-list ID	Number Tested	Number Failed	Verifying Organization	Printed Name Signature	Date
Nameplate - Manufacturer	Reotemp	X		1, IN							
Component Number-Procurement and/or Model Number	PR-25-S-1-A-4-P34-D	X		1, IN							
Dial Size	2.5" Diameter Nominal	X		1, IN							
Outlet Connection	1/4" NPT	X		1, IN							
Mounting	Bottom Mounting	X		1, IN							
Tube & Socket Material	316 SS	X		1, IN							
Pressure Range	0-5000 PSIG	X		1, IN							
Accuracy	Certificate of Calibration shows accuracy at least 1.6% of Full Scale per the documentation		X	1, IN							
Pressure Boundary	Pressure Test at 4400 psig (No Leakage-No Bubbles)		X	1, T							
Seismic Condition A	Maintain Critical Function Before and After Seismic Event.		X	1, T							

2. Disposition of Unverified or Failed Critical Characteristics

Critical Characteristic	Disposition

3. Signature Indicates All Critical Characteristics Verified Satisfactory or Acceptably Dispositioned and Commercial Grade Dedication is Satisfactory and Complete.

Testing Agency Approval: _____	Date: _____	Design Authority: _____	Date: _____
Testing Agency QA Engineer: _____	Date: _____	QA Engineer: _____	Date: _____
BUYER VERIFICATION			

Commercial Grade Item Upgrade Dedication Form		SNF-3929, Rev. 5
ECN No. NA	CGI No. CGI-SNF-D-13-P5-032	Page 11 of 11
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Section 6: Contacts / Phone Numbers		
Title	Name	Phone
Design Authority		
QA		
QC		
Cog - Engineer		
CGI Engineer	Larry Price	372-8770
Procurement Engineer		
Other		

Section 7: Supporting Documentation for This Checklist		
Initial Procurement Documents		For Critical Characteristics
☐	Drawings:	
☐	Manuals (specify type & number):	
☐	<i>Design Calculations</i>	
☐	Installation Instructions	
☐	Operation Instructions	
☐	Calibration Instructions	
☐	Manufacturer's Recommended Spare Parts List	
☒	Other: : Catalog Cut Sheets: Concoa 412 Series Regulator, Reotemp Pressure Gauges	All
Procurement Documents		
☐	Certificate of Conformance/Compliance	
☐	Seismic Qualification Certificate	
☐	Environmental Qualification Certificate	
☐	Test Report (s):	
☐	Inspection Report (s):	
☐	CMTRs for ASME Pressure Retaining Materials	
☐	Valve Seat Leakage Report	
☐	Weld Records	
☐	Material Traceability Record	
☐	Other:	

DISTRIBUTION SHEET

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