

4/25/00 658221

6

# ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN **658220**

Proj. ECN

<b>2. ECN Category (mark one)</b> Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedeure <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	<b>3. Originator's Name, Organization, MSIN, and Telephone No.</b> TA Nuxall, CVDF, R3-86, 372-3739		<b>4. USQ Required?</b> <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>CEM 2/25/00</i>	<b>5. Date</b> 2/25/00
	<b>6. Project Title/No./Work Order No.</b> W-441 Spent Nuclear Fuel Cold Vacuum Drying		<b>7. Bldg./Sys./Fac. No.</b> 142-K	<b>8. Approval Designator</b> N/A <i>CEM 2/25/00</i> S, N <sup>a</sup>
	<b>9. Document Numbers Changed by this ECN (includes sheet no. and rev.)</b> SNF-3929, Rev. 3		<b>10. Related ECN No(s).</b> N/A	<b>11. Related PO No.</b> N/A

<b>12a. Modification Work</b> <input type="checkbox"/> Yes (fill out Blk. 12b) <input checked="" type="checkbox"/> No (NA Blks. 12b, 12c, 12d)	<b>12b. Work Package No.</b> N/A	<b>12c. Modification Work Complete</b> N/A	<b>12d. Restored to Original Condition (Temp. or Standby ECN only)</b> N/A
Design Authority/Cog. Engineer Signature & Date		Design Authority/Cog. Engineer Signature & Date	

**13a. Description of Change**      **13b. Design Baseline Document?**  Yes  No

Added Concoa Regulator, added new forms and revised note 1 and note 5 (page 3 only). Deleted Matheson Regulator.

*The design verification method for SS/SC components is by independent review in accordance with EN-6-027-01. Documentation of this is accomplished by the independent reviewer approval signature provided on page 2 of this ECN.*

**USQ: CVD-00-0053 904 sub 3/7/00**

**14a. Justification (mark one)**

Criteria Change <input checked="" type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>
As-Found <input type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>

**14b. Justification Details**

Modified due to change in pressure of supply.

**15. Distribution (include name, MSIN, and no. of copies)**

See attached distribution.

RELEASE STAMP

MAR 10 2000  
 DATE  
 STA 4  
 HANFORD  
 RELEASE  
 ID: 4

**ENGINEERING CHANGE NOTICE**

<b>16. Design Verification Required</b> <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>CRM 2/15/00</i>	<b>17. Cost Impact</b> <i>N/A</i> ENGINEERING		CONSTRUCTION		<b>18. Schedule Impact (days)</b> <i>N/A</i> Improvement <input type="checkbox"/> Delay <input type="checkbox"/>
	Additional <input type="checkbox"/> \$ Savings <input type="checkbox"/> \$			Additional <input type="checkbox"/> \$ Savings <input type="checkbox"/> \$	

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

**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
<i>N/A</i>		

**21. Approvals**

	Signature	Date		Signature	Date
Design Authority	C. Miska <i>[Signature]</i>	2/25/00	Design Agent		
Designated Cog. Eng.	C. Van Katwijk <i>[Signature]</i>	3/2/00	PE		
Authorized Rep. Mgr.	T. Choho <i>[Signature]</i>	3/8/00	QA		
QA	R. Ramsgate <i>[Signature]</i>	3/2/00	Safety		
Safety <sup>N</sup>	J. Brehm <i>[Signature]</i>	3/7/00	Design		
<i>Independent Rvwr.</i>	<i>[Signature]</i>	3/8/2000	Environ.		
			Other		

**DEPARTMENT OF ENERGY**

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL

## RECORD OF REVISION

(1) Document Number  
SNF-3929

Page 1

(2) Title  
SNF-3929, CONCOA SCHe PRESSURE REGULATOR (SCHe TANK OUTLET)

### Change Control Record

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) EDT 626278, INITIALLY RELEASED		
1	ECN 653776 REVISION TO MEET SEL REV. 6		
2	ECN 647508, REVISION TO MEET SEL REV. 6a		
3	ECN 654031, PART MODEL NUMBER CHANGE		
RS 4	ECN 658221, DELETED MATHISON REGULATOR, ADDED CONCOA REGULATOR, ADDED NEW FORMS	CR nht 2/25/6	3/2/00

# INFORMATION CLEARANCE FORM

<b>A. Information Category</b> <input type="checkbox"/> Abstract <input type="checkbox"/> Journal Article <input type="checkbox"/> Summary <input type="checkbox"/> Internet <input type="checkbox"/> Visual Aid <input type="checkbox"/> Software <input type="checkbox"/> Full Paper <input checked="" type="checkbox"/> Report <input type="checkbox"/> Other _____	<b>B. Document Number</b> SNF-3929, Rev. 4 <b>C. Title</b> Concoa SCHe Pressure Regulators (SCHe Tank Outlet)  <div style="text-align: right; font-size: 1.2em; font-weight: bold;">Total page 14</div> <b>D. Internet Address</b>
---	--

<b>E. Required Information</b> 1. Is document potentially Classified? <input checked="" type="radio"/> No <input type="radio"/> Yes (MANDATORY)  <div style="text-align: center;"> <b>Manager's Signature Required</b>              If Yes <input checked="" type="radio"/> No <input type="radio"/> Yes Classified  <b>ADC Signature Required</b> </div> 2. Internal Review Required? <input checked="" type="radio"/> No <input type="radio"/> Yes If Yes, Document Signatures Below  Counsel _____ Program _____  3. References in the Information are Applied Technology <input checked="" type="radio"/> No <input type="radio"/> Yes Export Controlled Information <input checked="" type="radio"/> No <input type="radio"/> Yes	4. Does Information Contain the Following: (MANDATORY) a. New or Novel (Patentable) Subject Matter? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Disclosure No.: _____ b. Information Received in Confidence, Such as Proprietary and/or Inventions? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Affix Appropriate Legends/Notices. c. Copyrights? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Attach Permission. d. Trademarks? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Identify in Document. 5. Is Information requiring submission to OSTI? <input type="radio"/> No <input checked="" type="radio"/> Yes If Yes UC- _____ and B&R- _____ 6. Release Level? <input checked="" type="radio"/> Public <input type="radio"/> Limited 7. Charge Code <u>105559</u>
--	--

**F. Complete for a Journal Article**

1. Title of Journal \_\_\_\_\_

**G. Complete for a Presentation**

1. Title for Conference or Meeting \_\_\_\_\_

2. Group Sponsoring \_\_\_\_\_

3. Date of Conference \_\_\_\_\_

4. City/State \_\_\_\_\_

5. Will Information be Published in Proceedings?  No  Yes

6. Will Material be Handed Out?  No  Yes

<b>H. Author/Requestor</b> <u>Treah A. Nuxall</u> (Print and Sign)	<b>Responsible Manager</b> <u>Tarik Choho</u> (Print and Sign)
--	--

I. Reviewers	Yes	Print	Signature	Public Y/N (If N, complete J)
General Counsel	<input type="checkbox"/>	_____	_____	Y / N
Office of External Affairs	<input type="checkbox"/>	_____	_____	Y / N
DOE-RL	<input type="checkbox"/>	_____	_____	Y / N
Other	<input type="checkbox"/>	_____	_____	Y / N
Other	<input type="checkbox"/>	_____	_____	Y / N

**J. If Information Includes Sensitive Information and is not to be released to the Public indicate category below.** Information Classification Approval

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<input type="checkbox"/> Personal/Private	<input type="checkbox"/> Export Controlled
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<input type="checkbox"/> Business-Sensitive	<input type="checkbox"/> Patentable
<input type="checkbox"/> Predecisional	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> UONI	

**K. If Additional Comments, Please Attach Separate Sheet**

## RELEASE AUTHORIZATION

**Document Number:** SNF-3929, REV 4

**Document Title:** Concoa SCHe Pressure Regulators (SCHe Tank Outlets)

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**APPROVED FOR PUBLIC RELEASE**

  
M. A. Williams

3/10/00

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# Concoa SCHe Pressure Regulators (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 <sup>24</sup> PF  
3-10-00

# Concoa SCHe Pressure Regulators (SCHe Tank Outlet)

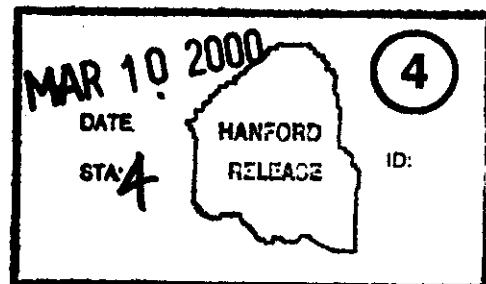
Carl Van Katwijk  
Fluor Hanford, Inc.

Date Published  
March 2000

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

**Fluor Hanford**

P.O. Box 1000  
Richland, Washington



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# Commercial Grade Item Upgrade Dedication Form

SNF-3929, Rev. 4

ECN No. NA

CGI No. CGI-SNF-D-13-P5-032

Page 1 of 8

Title: **Concoa SCHe Pressure Regulators (SCHe Tank Outlet)**

Item No.: *N/A*

Manufacturer: *N/A*

Supplier: *N/A*

Mfg. Part/Model No.: *N/A*

Supplier's P/N: *N/A*

Part Description: *N/A*

End Use Description: *N/A*

Equipment No.:

**SCHe-PCV-5\*04, 5\*23,5\*43,  
5\*63**

Specification No.:

**W-441-P5, Rev. 3**

Manufacturer:

**Concoa**

Past P.O. No.:

**N/A**

Procurement and/or  
Model No.:

**Concoa: 412-2000-01-0XA**

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.**

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)  
If not available from a qualified NQA1 supplier, is it available from an ISO 9000 supplier? (coordinate w/ project CGI Interface Engineer or BTR):  
 YES (go to #2 below, procedure step 6.3.2, dedicate Item)  NO (procedure step 6.3.2, dedicate Item)

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*

### 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.**

Commercial Grade Item Upgrade Dedication Form		SNF-3929, Rev. 4
ECN No. <u>NA</u>	CGI No. <u>CGI-SNF-D-13-P5-032</u>	Page 2 of 8
Title: <b>Concoa SCHe Pressure Regulators (SCHe Tank Outlet)</b>		

<input checked="" type="checkbox"/>	Item is being purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Class application.
<input type="checkbox"/>	Item is being purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Significant application.
<input type="checkbox"/>	Item was purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Class application.
<input type="checkbox"/>	Item was purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Significant application.
<input type="checkbox"/>	Other ('like-for-like', similar, substitution, replacement 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: <input type="checkbox"/> Active <input checked="" type="checkbox"/> Passive	Active - Mechanical or Electrical change of state is required to occur for the component to perform its safety function Passive - Change of state is not required for the component to perform its safety function
Safety Function #2: <input type="checkbox"/> Active <input checked="" type="checkbox"/> Passive	
Safety Function #3: <input type="checkbox"/> Active <input checked="" type="checkbox"/> 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.**

Environmental Qualification Required:	If yes: Environmental Qualification Requirements
Yes <input type="checkbox"/>	Limiting Environmental Conditions:
No <input checked="" type="checkbox"/> <b>Environmental Condition B</b>	Required Safety Functions:
	Qualification Period:
Natural Phenomena Hazard (NPH) Design Required:	If yes: NPH Design Requirements
Yes <input checked="" type="checkbox"/>	Performance Category: <b>PC-3</b>
No <input type="checkbox"/>	NPH Design Req'ts.: <b>Seismic Condition A</b>
HNF-PRO-97, Rev. 0	Required Safety Functions: <b>Maintain Pressure Boundary, Prevent Thermal Runaway and H2 Explosion, Maintain Critical Function Before and After Seismic Event</b>
W-441-P5, Rev. 3	

<input checked="" type="checkbox"/>	Safety Class (SC)	<input type="checkbox"/>	General Service (GS)	<input type="checkbox"/>	Safety Significant (SS)
-------------------------------------	-------------------	--------------------------	----------------------	--------------------------	-------------------------

If part/component classification is different from host component/system, document basis. **N/A**

National Codes/Standards: **ASME B31.3**  
 Safety Analysis Report (SAR): **HNF- 3553, Rev. 0, 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**

# Commercial Grade Item Upgrade Dedication Form

SNF-3929, Rev. 4

ECN No. NA

CGI No. CGI-SNF-D-13-P5-032

Page 3 of 8

Title: **Concoa SCHe Pressure Regulators (SCHe Tank Outlet)**

Critical Characteristics	Acceptance Criteria/Tolerances	Acceptance Method	ID	Function
<b>1. Item Identification Critical Characteristics (necessary for reasonable assurance that the Item delivered is the Item specified)</b>				
Nameplate - Manufacturer	Concoa	1, IN	X	
Regulator Component Number- Procurement and/or Model Number	412-2000-01-0XA , (Per Procurement Package W-441-P5, Rev. 3, Design Data Sheet)	1, IN	X	
Relief Valve Manufacturer/Model No. (furnished with regulator)	Concoa / 534-922-50, (ditto above)	1, IN	X	
Pigtail Manufacturer/Model No. / Connection Size / Length (furnished with regulator)	Concoa / 529-0070-680 / 1/4" MNPT / 2', (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 <sup>-8</sup> scc/sec, (ditto above)	1, IN	X	
<b>2. Physical Critical Characteristics (for reasonable assurance that the Item delivered is the Item specified)</b>				
Regulator Body Material	Brass (Note 4)	1, IN, 1, T	X	X
Regulator Outlet Connection	1/4" NPT Male	1, IN	X	
<b>3. Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))</b>				
Pressure Boundary	Pressure Test at 4400 psig (No Leakage-No Bubbles) Note 3	1, T		X
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)	50 plus 5 psig minus 5 psig	1, T		X
Environmental	Note 1			
Seismic Condition A	Note 2	1, T		X
<b>4. Notes and Legend:</b>		Acceptance Method:		
<ol style="list-style-type: none"> <li>The Concoa PCVs have stainless diaphragms. These materials are not subject to degradation at 40oF and 60% RH or 115oF and 22% RH and are suitable for condition B Application.</li> <li>Maintain critical function before and after seismic event. W-441-P5, Rev. 2, Appendix I, page I-2, provides a seismic testing plan for these components at a seismic spectra TBD. Equipment that has been shaker-table tested should not be installed in a plant (Ref. IEEE Standard 344-1984, Section 7). Consequently, the seismic test constitutes a destructive test.</li> <li>Pressure test at 110% component internal pressure of 4000 psig.</li> <li>Material verification acceptance method may be by either inspection or test.</li> <li>Model No: 412-2000-01-0XA is a assembly of catalog nos. i.e. no gauges, with pigtail, 5-0 psi relief valve, and factory relief valve plugged.</li> </ol>		<ol style="list-style-type: none"> <li>Special Test and Inspection 1, IN for Inspection 1, T for Test 1, A for Analysis</li> <li>Commercial Grade Survey</li> <li>Source Verification</li> <li>Vendor/Item History</li> </ol>		
<p>Rev. 4: All pages: added Concoa Regulator, added new forms and revised note 1 and added note 5 (Pg. 3 only). Deleted Matheson Regulator.</p>				

# Commercial Grade Item Upgrade Dedication Form

SNF-3929, Rev. 4

ECN No. NA

CGI No. CGI-SNF-D-13-P5-032

Page 4 of 8

Title: Concoa SCHe Pressure Regulators (SCHe Tank Outlet)

Approvals:

Designated Engineer: *Cover* 3/2/00

Design Authority: *Chen* 2/25/00

QA Engineer: *[Signature]* 2/2/00

## Worksheet 1 - Determination Of Failure Mechanisms

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.		

**1. Regulator Body Break**

**2. Diaphragm Break/Failure**

2/25/00

# Commercial Grade Item Upgrade Dedication Form

SNF-3929, Rev. 4

ECN No. **NA**

CGI No. **CGI-SNF-D-13-P5-032**

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Title: **Concoa SCHe Pressure Regulators (SCHe Tank Outlet)**

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

Item Description: **SCHe Tank Pressure Regulator and associated equipment**

Equip #: **SCHe-PCV-5\*05, 5\*23, 5\*43, 5\*63**

Procurement and/or Model #:

System #: **13**

Concoa: **412-2000-01-OXA**

Manufacturer (Address/Phone):

Supplier (Address/Phone):

**Concoa**  
**1502 Harpers Road**  
**Virginia Beach, VA**  
**23454**  
**800-225-0473**  
**Fx: 757-422-3125**  
**e-mail@concoa.com**

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. Pressure Boundary
	X		10. Setpoint
	X		11. Relief Valve Setpoint
	X		12. Seismic Condition A

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: **412-2000-01-OXA (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 #:

Characteristic: **Outlet Connection**

Sample Size\*: **100%**

Acceptance Criteria: **1/4" NPT Male**

Receipt Inspection Plan / Report #:

**Commercial Grade Item Upgrade Dedication Form**

SNF-3929, Rev. 4

ECN No. **NA**

CGI No. **CGI-SNF-D-13-P5-032**

Page 6 of 8

Title: **Concoa SCHe Pressure Regulators (SCHe Tank Outlet)**

Characteristic: **Relief Valve Manufacturer/Model No (supplied with regulator)**

Sample Size\*: **100%**

Acceptance Criteria: **Concoa / 534-922-50**

Receipt Inspection Plan / Report #:

Characteristic: **Pigtail Manufacturer/Model No. / Connection Size / Length (supplied with regulator)** Sample Size\*: **100%**

Acceptance Criteria: **Concoa / 529-0070-680 / 1/4" MNPT / 2'**

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<sup>-3</sup> scc/sec**

Receipt Inspection Plan / Report #:

Characteristic for Test: **Pressure Boundary**

Samp Size\*: Normal Reduced Tightened

Acceptance Criteria: **Pressure Test at 4400 psig (No Leakage-No Bubbles)**

Actual Test Value:

Test Plan and Report #:

Characteristic for Test: **Setpoint**

Samp Size\*: Normal Reduced Tightened

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:

Test Plan and Report #:

Characteristic for Test: **Relief Valve Setpoint**

Samp Size\*: Normal Reduced Tightened

Acceptance Criteria: **50 psig plus (+) 5 psig minus (-) 5 psig**

Actual Test Value:

Test Plan and Report #:

Characteristic for Test: **Seismic Condition A**

Samp Size\*: Normal Reduced Tightened

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:

Test Plan and Report #:

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

# Commercial Grade Item Upgrade Dedication Form

SNF-3929, Rev. 4

ECN No. NA

CGI No. CGI-SNF-D-13-P5-032

Page 7 of 8

Title: Concoa SCHe Pressure Regulators (SCHe Tank Outlet)

## 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/IN	Procedure or RRP#	Check-list ID	Number Tested	Number Failed	Verifying Organization	Printed Name Signature	Date
Nameplate - Manufacturer	Concoa	X		1, IN							
Component Number- Procurement and/or Model Number	412-2000-01-0XA, (Per Procurement Package 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 / 534-922-50	X		1, IN							
Pigtail Mfr/Model No. / Connection Size / Length	Concoa / 529-0070-680 / 1/4" MNPT / 2', (ditto above)	X		1, IN							
Panel Mount Kit Man./Model No.	Concoa / 550-0002, (ditto above)										
Pressure Boundary	Pressure Test at 4400 psig (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)	50 plus 5 psig minus 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: \_\_\_\_\_ Date \_\_\_\_\_

Testing Agency QA Engineer: \_\_\_\_\_ Date \_\_\_\_\_

Design Authority: \_\_\_\_\_

QA Engineer: \_\_\_\_\_

BUYER VERIFICATION

Date \_\_\_\_\_

Date \_\_\_\_\_

**Commercial Grade Item Upgrade Dedication Form**

SNF-3929, Rev. 4

ECN No. **NA**

CGI No. **CGI-SNF-D-13-P5-032**

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Title: **Concoa SCHe Pressure Regulators (SCHe Tank Outlet)**

Section 1: Point of Contact Numbers		
Title	Name	Phone
Design Authority		
QA		
QC		
Cog - Engineer		
CGI Engineer	Larry Price	372-8770
Procurement Engineer		
Other		

Initial Procurement Documents		For Critical Characteristics
<input type="checkbox"/>	Drawings:	
<input type="checkbox"/>	Manuals (specify type & number):	
<input type="checkbox"/>	Design Calculations	
<input type="checkbox"/>	Installation Instructions	
<input type="checkbox"/>	Operation Instructions	
<input type="checkbox"/>	Calibration Instructions	
<input type="checkbox"/>	Manufacturer's Recommended Spare Parts List	
<input checked="" type="checkbox"/>	Other: : Catalog Cut Sheets: Concoa 412 Series Regulator	All
Procurement Documents		
<input type="checkbox"/>	Certificate of Conformance/Compliance	
<input type="checkbox"/>	Seismic Qualification Certificate	
<input type="checkbox"/>	Environmental Qualification Certificate	
<input type="checkbox"/>	Test Report (s):	
<input type="checkbox"/>	Inspection Report (s):	
<input type="checkbox"/>	CMTRs for ASME Pressure Retaining Materials	
<input type="checkbox"/>	Valve Seat Leakage Report	
<input type="checkbox"/>	Weld Records	
<input type="checkbox"/>	Material Traceability Record	
<input type="checkbox"/>	Other:	



## DISTRIBUTION SHEET

To Distribution	From T. Nuxall, SNF-CVD	Page 1 of 1
Project Title/Work Order W-441, SNF-3929, Rev. 4		Date 2/25/00
		EDT No. N/A
		ECN No. 658221

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
D. Whitehurst	R3-86	x			
G. Signh	R3-86	x			
A. Artzer (CVD Library)	R3-86	x			
R. Ramsgate	R3-86	x			
J. Brehm	R3-26	x			
P. Beaudet	S8-07	x			
P. Morrell (AVS)	G1-50	x			
M. Evarts (AI)	N1-29	x			
L. Price	R3-26	x			
SNF Startup	B2-64	x			
SNF Project Files	R3-11	x			
SNF Satelite Library	X3-25	x			
C. Van Katwijk	R3-47	x			
D. Whitworth	R3-11	x			
T. Nuxall	R3-86	x			
C. Misica	R3-86	x			