

CHECKLIST (ATTACHMENT 1)
NOTIFICATION OF PROCESS CHANGE CHECKLIST

Record Number **460541**

Type Change Major ☐ Moderate ☒ Minor ☐

Originator: **Gary Rizzo** Date of Origination: **7/10/96**

Proposed Date of Change **4/11/96** Area: **MOD V** Followup Required: ☐ Yes ☒ No

Permanent ☐ Temporary ☐ From ☐ To ☐ Temp MOC Returned to Original Status ☐ Yes ☐ No

Description and Location of Change **Revise AO(121) - temp cntrl btms and level control EC-1500 when R-1300 is down.**

Technical Basis for Change: **When the reactor trips, the column cools off to much when it stays on Steam / Feed**

Impact on:

Type of Change:

☐
☐
☐
☐
☒

Safety

Alarm

Instrument

Shutdown Point

Process Computer Control

☐
☐
☐
☐

Loss Prevention

Addition or Removal of Equipment

Equipment/Material Modification

Piping Modification

☐
☐
☐
☐

Environment

Job Procedure

Chemical

Other

☐

Health

Pre-Modification Checklist:

Applicable	N/A	Initials	
.....	X	.....	Consult piping and equipment specifications.
.....	X	.....	Perform Reactive Chemicals testing. 7/10/96 In-Progress?
.....	X	.....	Add materials involved to Toxic Substance Control Act (TSCA) inventory.
.....	X	.....	Calculate impact on F&EI and CEI
.....	X	.....	Comply with Engineering Practices.
.....	X	.....	Comply with Technology Center guidelines.
.....	X	.....	Comply with Dow LAD Environmental Project Checklist.
.....	X	.....	Comply with Safety and Loss Prevention requirements.
.....	X	.....	Consult maintenance. (Name)
.....	X	.....	Consult instrument and electrical technician. (Name)
.....	X	.....	Consult parts technician. (Name)
.....	X	.....	Evaluate and modify relief system. (Name)
.....	X	.....	Contact Industrial Hygiene. (Name)
.....	X	.....	Contact Process Engineering. (Name)
.....	X	.....	Complete required reviews. (Name them)
.....	X	.....	Consult Computer programming support (Name)
.....	X	.....	Consult Operations (Name)
.....	X	.....	Contact Environmental (Name)
.....	X	.....	Champs work order (List)
.....	X	.....	Review Training Needs With Operations Supervisors or Technologist (Name)
.....	X	.....	Consult With Quality Person to determine if product MOC Required (Name)
.....	X	.....	Other

Approvals:

	Signature	Date	Signature	Date	Signature	Date
Originator	<i>Gary Rizzo</i>	7-10-96	First Reviewer	<i>[Signature]</i>	Final Reviewer	<i>[Signature]</i>

Post-Modification Checklist: (Before startup)

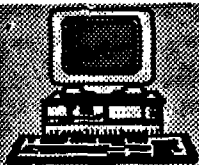
.....	X	.....	Perform pre-startup audit.	App	Na	Init
.....	X	.....	Complete or update training program.	.....	X	.....
.....	X	.....	Job procedures written and approved.	.....	X	.....
.....	X	.....	P&ID's, process flow sheets and plot plans updated.			
X	.....	<i>GR</i>	Personnel trained on the change. Training Documentation Attached	☐ Yes	☐ No	☐ No
.....	X	.....	Critical instrument checklist updated.			
X	.....	<i>GR</i>	MOD check sheet completed, computer code and documentation changed.			
.....	X		Complete and Update Plant Files and equipment files			

Final Reviewer

[Signature] **11/17/96**

Form No. 470-00162-291

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CHLORINATED METHANES MOD V DESCRIPTION OF CHANGE

**D**

System

C-1500

Equipment Number

100

Can

AO(121) - C-1500 Steam Control Valve.

Old Control

Upon enabling, AO(121) goes to a fixed flow rate AK(830) until a minimum temperature based on AC(47) is reached. When the minimum temperature is reached control switches to Steam/Feed ratio control. (see DC(803),DC(805))

New Control

The initial control is the same however when the minimum temperature is reached, control will now switch to bottoms temperature control and will remain in this control mode until the reactor is started up. Once the reactor has been started up, indicated by DC(2763) becoming TRUE, the control will switch to steam/feed ratio control. (See DC(143))

AO(131) - C-1500 Freon Control Valve

Old Control

When the system is first started up it is on level control. When the operator sets DK(74) true it switches to temperature control of tray 43 at AK(162) setpoint

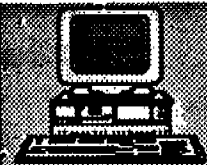
New Control

Anytime the reactor is down DK(74) autozero's placing AO(131) in the level control mode, controlling AI(104) at AK(804) setpoint.

Other Additions

Failure Logic for the following have been written and added to alarm (116)

- AI(161) - DC(761)
- AI(162) - DC(195)
- AI(172) - DC(1588)
- AI(182) - DC(1579)



CHLORINATED METHANES MOD V DESCRIPTION OF CHANGE



D

System

C-1500

Equipment Number

100

Can

Over Head Temperature Transmitter Logic Has Been Added.

AC(777) has been added to the overhead temperature control selection, allowing the operator to choose which overhead temperature transmitter they want to control. Also in the event that the default temperature, AI(162) fails, indicated by DC(195) becoming true, control will automatically switch to AI(172) and control at the temperature was running at the time of the swap. The operator also has the option of choosing any of the 3 temperatures for control by setting AK(847) equal to the transmitter. In the event that the transmitter chosen fails, the AK will be autozeroed on control will default back to AI(162).

Swapping From Bottoms Temp Control To Steam / Feed Control

When swapping from bottoms temperature control to steam/feed ratio control, if there is a difference between the actual ratio, AC(16) and the ratio setpoint AK(125) by an amount set by AP(790), DC(790) will become true, holding the ratio setpoint at its current value. DC(790) will remain true until the operator makes AK(125) equal to AC(16). When DC(790) becomes true, ALM(109) will activate, indicating that there is a setpoint problem.

When swapping from Steam/Feed ratio control to bottoms temperature control, the same situation occurs if the bottoms temperature differs to much from the actual setpoint. The current temperature latches in as the setpoint and remains as the setpoint until the board operator makes AK(161) equal to AC(1496). (SEE DC(1589), AC(1496)).

Contingencies

1. If, while on bottoms temperature control, AI(161) should fail, indicated by DC(195), control will switch to steam/feed ratio control.
2. If, while on steam/feed ratio control, a large feed reduction is indicated, control will switch to bottoms temperature control and the ov'hd will switch to level control. (See DC(1201),DC(143))
3. If all three ov'hd temperatures fail, the last good position will be held.

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**CHLORINATED METHANES
NON COMMUNIQUE TRAINING
RECORDS**

GARY RIZZO

Mod i - C 1500

7-

26

Facilitator

Training Area

Month

Year

C-1500 storm code revised - B time temp calculation - Failure Logic FBR
All (ver) 172, 182, 1941 WATL - A2627-FR-10-1-1 content when R-13 is FBR

Description

Staff

114

Super



SOS's

☒

OS's

11

Loaders

11

Day Oper.



Name

Master #

Classif.

Date

Signature

[illegible]