

CAUSTIC 1 / CHLOR-ALKALI 2

1997

REACTIVE CHEMICALS REVIEW

CRITICAL INSTRUMENTS

DO A 036693
CONFIDENTIAL



February 6, 1997

The Dow Chemical Company
P.O. Box 150
Plaquemine, Louisiana 70765-0150

Gretchen LeBlanc
Caustic / CA2 Plant

RE: Critical Instrument Program

The LAD Critical Instrument Program was reviewed and revised during 1996 to comply with the global standards as outlined in LPP 15.4. The new criteria focuses more on critical loops or systems rather than just the devices, and gives more clear-cut guidelines for designating these system as "critical". I have included an overview of the various levels in the program. The Instrument Central Support group worked with plant engineers to develop the list of critical loops for each block. Our goal with the new program is to functionally test the entire system, including any trips if possible.

New procedures have been written in order to accomplish this. Input from the block Instrument Specialist and area engineers were solicited in developing these procedures. Also GEMTS PM Modules have been entered to create work requests in the appropriate queues so that these tests are performed at the required frequency. We will also be reviewing the frequency of the tests based on past history and optimizing where possible.

Training for all Instrument and Analyzer personnel is taking place during January and February. This training will cover how to obtain and use the procedures, and how to appropriately document results.

For the Caustic and CA2 Plants:

- All GEMTS PM modules have been created for the Crit Inst checks
- All procedures are complete and loaded into the Maint Op Disc System
- All personnel have been trained
- All P&ID drawings have been updated
- All physical devices have been identified in the field

Attached is a list of the critical systems for the Caustic and CA2 plants. This list indicates the PM Modules which identify the various systems, the individual instrument tags in each system and the consequence of system failure.

The GEMTS system will be used to keep the long-term performance history. Each procedure must be signed and dated when it is used and returned to the Central Instrument Support group. As managers of the Critical Instrument Program, we will make the appropriate GEMTS entries and retain the paper copy from the most recent check. The Central Support function will also monitor the overdue reports and notify the appropriate party if a check is overdue.

If you have any questions please do not hesitate to call.


Debbie Mack
I/A Central Support
6234

DO A 036694
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LPP 15.4 CRITICAL INSTRUMENT PROGRAM

RISK MATRIX

LEVEL 1 (Not normally classified as critical)

Minor injury as result of chemical exposure
Environmental incident where contamination confined to site and recovery complete
in 1 year, or reportable to government agency
Properly damage and/or business interruption >\$50M and <\$1MM
Fire that is controlled by on-site personnel

LEVEL 2 (LAD Critical Instrument Program)

Day away from work case (DAWC)
Incident resulting in local public being told to shelter indoors
Environmental incident involving off-site cleanup or which could contaminate ground water
Properly damage and/or business interruption >\$1MM and <\$50MM
Fire that requires off site fire fighters to control

LEVEL 3 (LAD OSHA Process Safety Management Critical)

Fatality on or off site, injury resulting in hospitalization to member of public off site.
Environmental incident resulting in cleanup off site or a fine
Event leading to need to evacuate members of general public
Properly damage and/or business interruption >\$50MM and <\$800MM
Fire or explosion leading to properly damage off site

LEVEL 4 (Unacceptable risk - must be reduced to level 3 or less)

Multiple fatalities on or off site
Permanent environmental damage to an area >5 hectares of a natural habitat off site
Properly damage and/or business interruption >\$800 MM.

LAD CRITICAL INSTRUMENT LIST					CA2 PLANT					Review Date: 1/97	
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GEMTS	PROC	DRAWING #	FIELD ID
PT-1001	PT-1001	I50	Low Breathing Air to control room	Loss of breathing air pressure	2	N	6M	Y	Y	N/A	Y
T-301_LEVEL	LSH-3311 TSH-3314	I40	T-301 high level switch	Potential personnel injury	2	N	3M	Y	Y	B1-305	Y
PSL-3228	PSL-3228	I50	P-302 gear low oil pressure	Major equipment damage	2	N	3M	Y	Y	B1-304	Y
IT-3651	IT-3651	I90	A-301 high amps	Major production loss	2	N	3M	Y	Y	B1-322	Y
LIQ_CL2	PT-52425 EV-52400 EV-52402 EV-52405	I80	Liquid transfer line EBVs	Potential undetected leak	3	N	1M	Y	Y	B1-502F	Y
D-227B_TEMP	TT-2613A TT-2613B CV-2604	I70	D-227 B temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y
D-277A_TEMP	TT-2614A TT-2614B CV-2604	I70	D-227 A temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y
D-526_H2	AE-51310 AE-51311 AE-51312	IA18	High H2 inerts in D-526 tail gas	Explosive potential	2	N	3M	Y	Y	B1-5513	Y
AI-161_O2	AT-6091 AT-6092 AT-6093 CV-6114 EV-6007 MC-601	IA16	AI-161 O2 in H2 analyzer	Explosive potential	2	N	SD	Y	Y	B1-604	Y
CGD-CRIT-CHECKS	CGD Crew Maintains List	IA11	Area Combustible Monitors Analyzer House Monitors	Explosive potential Potential for asphyxiation	2	N	12M	Y	Y	N/A	Y

LAD CRITICAL INSTRUMENT LIST				CAUSTIC PLANT						Review Date: 1/97	
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GEMTS	PROC	DRAWING #	FIELD ID
LSH-05600	LSH-05600	I40	D-205 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2056	Y
LSH-9013	LSH-9013	I40	D-207 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2222	Y
LSH-1537	LSH-1537	I40	T-204 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2032	Y
CGD-CRIT-CHECKS	CGD Crew Maintains list	IA11	COMBUSTIBLE GAS MONITORS ANALYZER HOUSE MONITORS	POTENTIAL FOR EXPLOSIVE MIXTURE	2	N	12M	Y	Y	N/A	Y

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January 22, 1997

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LAD CRITICAL INSTRUMENT LIST					CA2 PLANT							Review Date: 1/97	
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GEMTS	PROC	DRAWING #	FIELD ID		
PT-1001	PT-1001		Low Breathing Air to control room	Loss of breathing air pressure	2	N	6M	Y	Y	N/A	Y		
LSH-3311	LSH-3311 TSH-291	I40	T-301 high level switch	Potential personnel injury	2	N	3M	Y	Y	B1-305	Y		
PSL-3228	PSL-3228	I50	P-302 gear low oil pressure	Major equipment damage	2	N	3M	Y	Y	B1-304	Y		
IA-3651	IA-3651	I90	A-301 high emps	Major production loss	2 ²	N	3M	Y	Y	B1-322	Y		
LIQ_CL2	PT-52425 EV-52400 EV-52402 EV-52405	I80	Liquid transfer line EBV	Potential undetected leak	3	N	1M	Y	Y	B1-502F	Y		
D-227B_TEMP	TT-2613A TT-2613B CV-2604	I70	D-227 B temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y		
D-277A_TEMP	TT-2614A TT-2614B CV-2604	I70	D-227 A temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y		
D-526_H2	AT-51310 AT-51311 AT-51312	IA18	High H2 inerts in D-526 tail gas	Explosive potential	2	N	3M	Y	Y	B1-5513	Y		
AI-161_O2	AT-6091 AT-6092 AT-6093 CV-6114 EV-6007 MC-601	IA16	AI-161 O2 in H2 analyzer	Explosive potential	2	N	SD	Y	Y	B1-604	Y		
CGD-CRIT-CHECKS	CGD Crew Maintains List	IA11	Area Combustible Monitors Analyzer House Monitors	Explosive potential Potential for asphyxiation	2	N	12M	Y	Y	N/A	Y		

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Crit Inst
ca2.xls

LAD CRITICAL INSTRUMENT LIST					CA2 PLANT							Review Date: 1/87	
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GEMTS	PROC	DRAWING #	FIELD ID		
Bldgs & Grnds	PT-1001	PT-1001		Low Breathing Air to control room	Loss of breathing air pressure	2	N	6M	Y	Y	N/A	Y	
Caustic	LSH-3311	LSH-3311 TSH-291	140	T-301 high level switch	Potential personnel injury	2	N	3M	Y	Y	B1-305	Y	
Caustic	PSL-3228	PSL-3228	150	P-302 gear low oil pressure	Major equipment damage	2	N	3M	Y	Y	B1-304	Y	
Caustic	IA-3651	IA-3651	190	A-301 high amps	Major production loss	2 ²	N	3M	Y	Y	B1-322	Y	
Liquefaction	LQ_CL2	PT-52425 EV-52400 EV-52402 EV-52405	180	Liquid transfer line EBV	Potential undetected leak	3	N	1M	Y	Y	B1-502F	Y	
Purification	D-227B_TEMP	TT-2613A TT-2613B CV-2604	170	D-227 B temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y	
Purification	D-277A_TEMP	TT-2614A TT-2614B CV-2604	170	D-227 A temperature transmitter	Explosive potential (taffy pots)	2	N	3M	Y	Y	B1-218C	Y	
Liquefaction	D-526_H2	AT-51310 AT-51311 AT-51312	1A18	High H2 inerts in D-526 tail gas	Explosive potential	2	N	3M	Y	Y	B1-5513	Y	
Hydrogen Recovery	AI-161_O2	AT-6091 AT-6092 AT-6093 CV-6114 EV-6007 MC-601	1A16	AI-161 O2 in H2 analyzer	Explosive potential	2	N	SD	Y	Y	B1-604	Y	
Bldgs & Grnds	CGD-CRIT-CHECKS	CGD Crew Maintains List	1A11	Area Combustible Monitors Analyzer House Monitors	Explosive potential Potential for asphyxiation	2	N	12M	Y	Y	N/A	Y	

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LAD CRITICAL INSTRUMENT LIST				CAUSTIC PLANT						Review Date: 1/97	
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GEMTS	PROC	DRAWING #	FIELD ID
LSH-05600	LSH-05600	I40	D-205 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2056	Y
LSH-9013	LSH-9013	I40	D-207 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2222	Y
LSH-1537	LSH-1537	I40	T-204 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2032	Y
CGD-CRIT-CHECKS	CGD Crew Maintains list	IA11	COMBUSTIBLE GAS MONITORS ANALYZER HOUSE MONITORS	POTENTIAL FOR EXPLOSIVE MIXTURE	2	N	3M	Y	Y	N/A	Y

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Caustic
Caustic
Caustic
Bldgs & Grnds

LAD CRITICAL INSTRUMENT LIST				CAUSTIC PLANT							Review Date: 1/97
PM MODULE	TAG #	GRP	DESCRIPTION	CONSEQUENCES OF FAILURE	LEVEL	REQ	FREQ	GENTS	PROC	DRAWING #	FIELD ID
LSH-05600	LSH-05600	I40	D-205 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2056	Y
LSH-9013	LSH-9013	I40	D-207 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2222	Y
LSH-1537	LSH-1537	I40	T-204 HI LEVEL SWITCH	POTENTIAL PERSONNEL HAZARD	2	N	6M	Y	Y	BI-2032	Y
CGD-CRIT-CHECKS	CGD Crew Maintains list	IA11	COMBUSTIBLE GAS MONITORS ANALYZER HOUSE MONITORS	POTENTIAL FOR EXPLOSIVE MIXTURE	2	N	3M	Y	Y	N/A	Y

DO A 036703
CONFIDENTIAL

Description: D-204 Hi Level Switch

Tag: LSH-1537

Critical Inst. Level: 2

Introduction

This procedure is used to provide a method of checking the functionality of LSH-1537. This is actually a differential pressure transmitter, calibrated such that a small amount of differential will result in a high level indication.

There is no trip associated with this device. It is an alarm only to warn personnel of a potential overflow of the caustic tank.

Who is responsible

The following table lists the job roles and their duties:

Role	Responsibilities
Operations	Process Isolation
Operations	Inst. In and Out of Service
Instrument Man	Inst. Check and Maint.

Hazards/Warnings

Following is a list of hazards with associated precautions that should be taken before beginning this procedure. (Consider the areas of safety, toxicity, exposure, and environmental hazards.)0

Hazard	Precaution
Caustic	Wear proper protective equipment

Safety equipment

The table below lists the safety equipment required to perform this procedure. If you do not have the required safety equipment, contact the Safety/Training Foreman.

Safety Equipment	Location
Hard hat, safety glasses, goggles, rubber boots and hearing protection.	Personal
Respirator	Personal

Lockout/Tagout requirement	This procedure <u>Does Not</u> address a Lockout/Tagout issue.
Waste disposal	none
Quality considerations	This procedures <u>DOES NOT</u> affect the quality of our product. (If it does, explain how it does.)
Consequence of system failure:	Failure of this device to function properly could result in overfilling of D-204. Because the overflow tube occasionally plugs, personnel in the area could be contacted with hot caustic as the level continues to rise and spills over the tank.
Special tools	Following is a list of special tools you will need to perform this procedure: - Volt/Amp Meter - Pump-up Kit 2 Way Radio
References/definitions	While performing this procedure, refer to the following (documents, procedures, drawings, set points, ranges and trip points etc.):
Set Points , Ranges ,	Reference GEMTS for alarm point. There is no trip associated with this device.
Trip Points	
Procedure	Follow the steps below to description. <u>Note:</u> An asterisk (*) in the "Check" column indicates a critical item which requires initials.

Step	Action	Check
1	Have operations block, bleed and tag transmitter	*
2	Get permit and sign Red Tag Master	*
3	Check with control room before proceeding	*
4	Connect volt meter to transmitter	*
5	Verify meter indicates transmitter is at zero	*
6	Using pump up kit, pressure up transmitter slowly to alarm point.	*
7	Verify high level alarm sounds in control room. Note pressure reading when alarm sounds. Verify that alarm point is correct. Record alarm level: _____ % level	*

8	De-pressure and remove pump up kit.	*
9	Verify transmitter returned to zero.	*
10	Release red tag master and turn in safe work permit	*
11	Notify operations that test is complete. Sign and date below. Create maintenance work order for any devices that need repair.	*
12	Test performed by: _____ Date _____ WO Number _____ All devices performed as expected _____ Y _____ N List any comments below:	*

Reviews

This document was last reviewed by the following individuals:

Name/Title	Date Reviewed
Ricky Lemelle / Technologist	12/96
Leroy Jefferson / Inst. Specialist	12/96

Document history

The following table documents the latest changes to this document. Procedures will be reviewed *at least* annually. Updates will be made as necessary and noted below.

Date	Created/Revised By	Changes
8/29/96	Roger Sanford	New

Description: D-205 High Level Switch

Tag: LSH-05600

Critical Inst.
Level: 2

Introduction

This procedure is used to provide a method of checking the functionality of LSH-05600. This is actually a Rosemount differential pressure transmitter, calibrated such that a small amount of differential, will result in a high level indication.

There is no trip associated with this device. It is an alarm only to warn personnel of a potential overflow of the caustic tank.

Who is responsible

The following table lists the job roles and their duties:

Role	Responsibilities
Operations	Process Isolation
Operations	Inst. In and Out of Service
Instrument Man	Inst. Check and Maint.

Hazards/Warnings

Following is a list of hazards with associated precautions that should be taken before beginning this procedure. (Consider the areas of safety, toxicity, exposure, and environmental hazards.)

Hazard	Precaution
Caustic	Wear proper protective equipment

Safety equipment

The table below lists the safety equipment required to perform this procedure. If you do not have the required safety equipment, contact the Safety/Training Foreman.

Safety Equipment	Location
Hard hat, safety glasses, monogoggles, rubber boots and hearing protection.	Personal
Respirator	Personal

Lockout/Tagout requirement

This procedure Does Not address a Lockout/Tagout issue.

Waste disposal

none

Quality considerations

This procedure DOES NOT affect the quality of our product. (If it does, explain how it does.)

Consequence of system failure:

Failure of this device to function properly could result in overfilling of D-205. Because the overflow tube occasionally plugs, personnel in the area could be contacted with hot caustic as the level continues to rise and spills over the tank.

Special tools

Following is a list of special tools you will need to perform this procedure:

- Volt/Amp Meter
- Pump-up Kit
- 2 Way Radio

References/definitions

While performing this procedure, refer to the following (documents, procedures, drawings, set points, ranges and trip points etc.):

Set Points , Ranges ,

Trip Points

- Reference GEMTS for ranges and alarm points. There is no trip associated with this device.
-

Procedure

Follow the steps below to description.

Note: An asterisk (*) in the "Check" column indicates a critical item which requires initials.

Step	Action	Check
1	Have operations block, bleed and tag transmitter	*
2	Get permit and sign Red Tag Master	*
3	Check with control room before proceeding	*
4	Connect volt meter to transmitter	*
5	Verify meter indicates transmitter is at zero	*
6	Using pump up kit, pressure up transmitter slowly to alarm point.	*

7	Verify high level alarm sounds in control room. Note pressure reading when alarm sounds. Verify that alarm point is correct. Record trip level: _____ % level	*
8	De-pressure and remove pump up kit.	*
9	Verify transmitter returned to zero.	*
10	Release red tag master and turn in safe work permit	*
11	Notify operations that test is complete. Sign and date below. Create maintenance work order for any devices that need repair.	*
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Date	Created/Revised By	Changes
8/28/96	Roger Sanford	New

Description: D-207 Hi Level Switch

Tag: LSH-9013

**Critical Inst.
Level:** 2

Introduction

This procedure is used to provide a method of checking the functionality of the high level alarm on D-207.

There is no trip associated with this device. It is an alarm only to warn personnel of the potential overflow of the caustic tank.

Who is responsible

The following table lists the job roles and their duties:

Role	Responsibilities
Operations	Process Isolation
Operations	Inst. In and Out of Service
Instrument Technician	Inst. Check and Maint.

Hazards/Warnings

Following is a list of hazards with associated precautions that should be taken before beginning this procedure. (Consider the areas of safety, toxicity, exposure, and environmental hazards.)

Hazard	Precaution
Caustic	Wear proper protective equipment
110 VAC	Check with meter before proceeding

Safety equipment

The table below lists the safety equipment required to perform this procedure. If you do not have the required safety equipment, contact the Safety/Training Foreman.

Safety Equipment	Location
Hard hat, safety glasses, goggles, rubber boots and hearing protection.	Personal
Respirator	Personal

Lockout/Tagout
requirement

This procedure Does Not address a Lockout/Tagout issue.

Waste disposal

none

Quality
considerations

This procedures DOES NOT affect the quality of our product. (If it does, explain how it does.)

Consequence of
system failure:

- Failure of this device to function properly could result in overfilling of D-207. Because the overflow tube occasionally plugs, personnel in the area could be contacted with hot caustic as the level continues to rise and spills over the tank.

Special tools

Following is a list of special tools you will need to perform this procedure:

- Volt/Amp Meter
- 2 Way Radio

References/definitions

While performing this procedure, refer to the following (documents, procedures, drawings, set points, ranges and trip points etc.):

Set Points , Ranges ,

- There are no alarm or trip points associated with this system. The primary device is a level switch.

Trip Points

-

Procedure

Follow the steps below to description.

Note: An asterisk (*) in the "Check" column indicates a critical item which requires initials.

Step	Action	Check
1	Have operations prepare switch for test	*
2	Get Permit and sign Red Tag Master	*
3	Check with control room before proceeding	*
4	Using volt meter, check switch to make sure it is safe for testing	*
5	Lift alarm wire on switch.	*
6	Verify alarm in the control room	*
7	Replace wire	*
8	Verify alarm cleared	*
9	Release red tag master and turn in safe work permit	*
10	Notify operations that test is complete. Sign and date below. Create maintenance work order for any devices that need repair.	*

11	Test performed by: _____	*
	Date _____	
	WO Number _____	
	All devices performed as expected _____ Y _____ N	
	List any comments below:	

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8/29/96	Roger Sanford	New

2015.12.15

1

CAUSTIC 1 CRITICAL AND PM INSTRUMENT LIST

FIELD TAG	DESCRIPTION	Pm/critical	PSM	Proc.	Gemts	Freq.	Type Equipment	Equipment Group
LSH-05600	D-205 high level switch	CRITICAL						
LSH-9013	D-207 high level switch	CRITICAL						
LSH-1537	T-204 high level switch	CRITICAL						
LS-82010	Load station #1 tank car high lvl	PM		yes	yes	1		I40
LS-82011	Load station #2 tank car high lvl	PM		yes	yes	1		I40
LS7168	T-245 high level alarm	PM		no	yes	26		I40
LS7168A	T-245 high high level alarm	PM		no	yes	26		I40
LSH-601B	Tank car rack level switch on S-1	PM		yes	yes	1		I40
LSH-603B	Tank car rack level switch on S-2	PM		yes	yes	1		I40
LSH-604B	Tank car rack level switch on S-3	PM		yes	yes	1		I40
LSH-606B	Tank car rack level switch on S-4	PM		yes	yes	1		I40
LSH-607B	Tank car rack level switch on N-4	PM		yes	yes	1		I40
LSH-609B	Tank car rack level switch on N-3	PM		yes	yes	1		I40
LSH-610B	Tank car rack level switch on N-2	PM		yes	yes	1		I40
LSH-612B	Tank car rack level switch on N-1	PM		yes	yes	1		I40
LT-1842	E-203 level trip transmitter	PM		no	yes	52	rosemt	I40
PH-6053	Ph in the outfall canal	PM			yes	4	rosemt	I10
PH-6054	Ph in the outfall canal	PM			yes	4	rosemt	I10
PH6057	Ph of the outfall canal	PM			yes	4	rosemt	I10
PH7353A	Trench sump indication	PM			yes	4	yew	I10
PHI1097	Ph in the RW out of HE-208	PM		yes	yes	4	rosemt	I10
PHI1689	Ph in the RW out of CD-204A	PM			yes	4	rosemt	I10
PHI2418	T-11 ph transmitter	PM		yes	yes	4		I10
PHI6051	Ph in hotwell by canal	PM			yes	4	rosemt	I10
PHI6055	Ph in the outfall canal	PM			yes	4	rosemt	I10
PHI6056	Ph in the outfall canal	PM			yes	4	rosemt	I10

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CAUSTIC 1 CRITICAL AND PM INSTRUMENT LIST

FIELD TAG	DESCRIPTION	Pm/critical	PSM	Proc.	Gemts	Freq.	Type Equipment	Equipment Group
PHI6061	Ph west side of block	PM			yes	4	rosemt	I10
PHI7024	Ph rw out of cooler & chillers etc	PM			yes	4	rosemt	I10
PHT-7353	Trench sump control PH	PM			yes	4	yew	I10
TSL-2411B	ARU-205 low temperature trip	PM		no	yes	52		I70
TSL-2415B	ARU-204 low temperature trip	PM		no	yes	52		I70
FT-1634	E-204 flowmeter	ISO		yes	yes	16		I50
LT-1625	E-204 level tran. (0-378" water)	ISO		yes	yes	26		I40
LT-1626	E-204 level tran. (0-378" water)	ISO		yes	yes	26		I40
PT-1621	E-204 pressure transmitter	ISO		no	yes	26		I50
PT-1621A	E-204 pressure transmitter	ISO		no	yes	26		I50
TT-1628	E-204 inlet temperature trans.	ISO		yes	yes	26		I70
TT-50006	T-28 temperature transmitter	ISO		yes	yes	26		I70
TT1628A	P-204E discharge temperature	ISO		yes	yes	26		I70

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