



Form : QR-22.1  
Rev. : 3 , Date : 01/07

# NONCONFORMANCE REPORT

NCR # NCR080820MJBa

Refer to Inspection Report # 6077837

**PRIORITY** ☒ **Level 0 - Serious/Code Resolve Immediately**  
☐ **Level 1 - Major Resolve within 14 days**  
☐ **Level 2 - Minor Resolve within 30 days**  
☐ **Level 3 (Shutdown) Resolve at next shutdown**

☒ **Internal (Husky)** ☐ **External (Contractor)**  
**NCR Identified By** Murray Butcher  
**NCR to be Actioned By** Ron Chapman  
**NCR to be Resolved By** Dabir Naqui

## LOCATION & EQUIPMENT / PROCEDURE IDENTIFICATION

<b>Production District</b>	<u>HOG</u>	<b>Facility</b>	<u>All HOG areas</u>	<b>LSD</b>	<u>----</u>
<b>Equipment Description</b>	<u>PSV Isolation</u>	<b>Manufacturer</b>	<u>-----</u>	<b>Husky ID #</b>	<u>-----</u>
<b>Prov. Registration #</b>	<u>-----</u>	<b>CRN</b>	<u>-----</u>	<b>Serial #</b>	<u>-----</u>

## DESCRIPTION OF NONCONFORMANCE (To be completed by person identifying the NCR) Please attach photos when applicable

Installation inspection found a PSV with inlet and outlet isolation valves that were not carsealed or locked (see the attached photo). The PSV location was 5-36-49-20-W3 - VaporTech Compressor Skid. Operations for that area stated they were not aware of any procedures, forms, or control processes for PSV isolation valve(s). Further informal audits in other HOG areas found similar responses.

## CAUSE OF NONCONFORMANCE (To be completed by person identifying the NCR or person issuing the NCR)

<input checked="" type="checkbox"/> Noncompliance with Husky Integrity Program/Procedure	<input checked="" type="checkbox"/> Noncompliance with Code , Act or Regulation
<input type="checkbox"/> Noncompliance with Husky Eng. Specs	<input type="checkbox"/> B31.1 <input type="checkbox"/> B31.3 <input type="checkbox"/> Sect VIII <input type="checkbox"/> Sect I
<input type="checkbox"/> Other	<input type="checkbox"/> Sect V <input type="checkbox"/> CSA B51 <input type="checkbox"/> Z662 <input type="checkbox"/> Other

## PRELIMINARY REVIEW (To be completed by Chief or Facility Inspector)

### Prior To Issuing , Nonconformity Has Been Discussed With

☒ Operations ☐ Engineering ☐ Maintenance ☐ Contractor ☐ Authorized Inspector

**NCR Issued By :** Ron Chapman

Chief Inspector - Level 0 & 3  
Facility Lead Inspector - Level 1 & 2

Print

Signature

Date

## RECOMMENDED ACTION (To be completed by person assigned to action the NCR)

☐ Scrap ☐ Use "As-Is" ☐ Repair ☐ Alteration ☐ Replace ☐ Return to Supplier

Describe actions required to resolve the NCR :

*Training coordinator to issue training documents to operations personnel, identifying proper procedures in dealing with psv isolation.*

Prepared by (Please Print)

Signature

Date

## APPROVAL OF RECOMMENDED ACTION

Required	Yes	No		Signature	Date
			Chief or Facility Lead Inspector (Please Print)		
			Tech Leader / Project Lead (Please Print)		
			Operations or Contractor (Please Print)		
			Authorized Inspector (Please Print)		

## DESCRIPTION OF RESOLUTION (To be completed by person assigned to resolve the NCR)

Describe actions taken to resolve the NCR :

*Training co-ordinator has issued proper isolation Procedures to operations (see attached)*

## RESOLUTION & ACTION FOLLOW-UP

**Resolution Completed**

RAY TRACHUK  
Print Name

*Ray Trachuk*  
Signature

09-06-17  
Date

☒ **Acceptable** ☐ **Unacceptable** ☐ **Corrective Action Required**

Identify if actions were acceptable or if additional actions are required :

Completed forms are to be e-mailed or faxed to : \_\_\_\_\_ e-mail \_\_\_\_\_ Fax # \_\_\_\_\_  
 Issued NCRs have been provided to : \_\_\_\_\_  
 NCR has been entered into database by : \_\_\_\_\_ Date : \_\_\_\_\_

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Section:	IBP-003a Inspection Best Practices	Revised:	Dec 7, 2004
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## WESTERN CANADA UPSTREAM AND MIDSTREAM PRODUCTION FACILITIES

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Operating Procedure

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IBP-003a	Isolation Valve Current Status Log
IBP-003b	In-Service Operation Authorization
IBP-003c	Inventory Listing

*(\*\*\* Copies of this procedure can be obtained from the Husky intranet by following this path:  
Departments > Operations > Exploration and Production Services > Facilities Engineering and Technical  
Services > Asset Integrity > Calgary Operating District > Inspection Best Practices. OR by contacting the  
Facilities Lead Inspector)*

*Saskatchewan Procedure reference file # BV-22 (Sask. Boiler and PV Safety, requires procedure  
registration for each facility where this procedure will be implemented in Sask. Rather than re-registering  
the procedure for each facility, a letter requesting addition of a new facility to the Husky Facility List is  
required, referencing the above file #)*

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### STATEMENT OF AUTHORITY

This document describes the systems and procedures that are implemented by Husky Energy to ensure that pressure relief device isolation valves are controlled and operated in a manner that assures the safety of personnel, equipment and the environment.

This document has the full support of Husky Energy Western Canada Upstream and Midstream Production Districts' Technical and Operations Management.

The Operating Area Technical Services Manager, assumes overall responsibility to ensure the Pressure Relief Device Isolation Valve Control Procedure is implemented and effective.

Operations Area Managers / Superintendents / Midstream Coordinator and Designated Competent Operating Personnel implement this procedure at all operating facilities where isolation valves are used.

The Lead Inspector has the authority and organizational freedom to initiate corrective action and provide solutions to problems found in the implementation of this procedure.

This procedure has the full support of the Husky Energy Western Canada Upstream Production/Management and personnel. All personnel are required to work within the requirements of this procedure, local jurisdictional regulations, codes, and standards governing their facility. Husky Energy acknowledges that the Jurisdictional Authority has the right to audit, and where applicable, revoke this procedure.

### **Signatures of Review and Acceptance**

Title	Name	Signature	Date
Technical Services Manager:			
Operating Area Manager / Superintendent / Equivalent:			

### **OPERATIONS DESIGNATE <sup>\*\*</sup>(This signature required on Facility Copy for audit purposes)**

Designated Operating Personnel, trained and competent in the operation of facilities, sign and date at this Form on a per facility basis. The signature indicates they have read and understood the contents of this procedure and will implement all of the requirements stated.

Facility: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

This page with Engineering and Management Signatures will be posted on the Husky Intranet.

***\*\*This page must be updated or replaced when organizational changes require a new signature.***

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## SCOPE

This procedure describes means for the identification, installation, operation and control of pressure relief device isolation valves at all facilities within the Western Canada Upstream and Midstream Production Facilities.

This procedure is used in-conjunction with the Husky Pressure Equipment Integrity Management Program Section PEIM-20, Part PRD-4, Health & Safety Policy Procedure Procp.16 and ASME Section VIII, Division 1 Appendix M.

## ROLES & RESPONSIBILITIES

Roles and responsibilities as described in the Husky Energy's Pressure Equipment Integrity Management Program Section PRD-4 shall apply to this procedure.

Specific personnel responsible for the control of pressure relief device, isolation valves within Western Canada Upstream and Midstream Production Areas are given on the form on the previous page. Acceptance of responsibility is verified by signature.

This list shall be reviewed and updated in conjunction with the renewal of the Pressure Equipment Integrity Management Program, and when significant organizational changes take place. Completed forms supplying management signatures are available on the Husky Intranet. Forms supplying Operations Personnel signatures are available at the sites where the designate has responsibility.

## ISOLATION VALVE INSTALLATION

All pressure relief device isolation valves are installed in accordance with the requirements of PRD-4 clause 3.0. Valves shall be locked in position by means of a chain and padlock or a car seal.

Installation of new PRD Isolation Valves shall be managed and approved in accordance with PEIM 13 - Management of Change (MOC) Section of the Corporate Pressure Equipment Integrity Management Program.

All pressure relief device isolation valves are to be tagged with a unique identification number. Isolation valves are identified on the sites Process & Instrumentation Diagrams. Each site maintains an inventory listing referencing an identification number, the applicable operating procedure for operation of the valve and primary purpose of the isolation valve.

Isolation Valves installed for unit / battery isolation from a common flare header, require a detailed, site specific operating procedure. The procedure will, when required by the jurisdictional authority, be provided for review and approval prior to installation of these isolation valves. *(Presently a requirement in Saskatchewan only)* See typical unit/battery installation configurations from API 520 Part II Figures 17 and 18.

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### TYPICAL ISOLATION VALVE INSTALLATION CONFIGURATIONS (3)

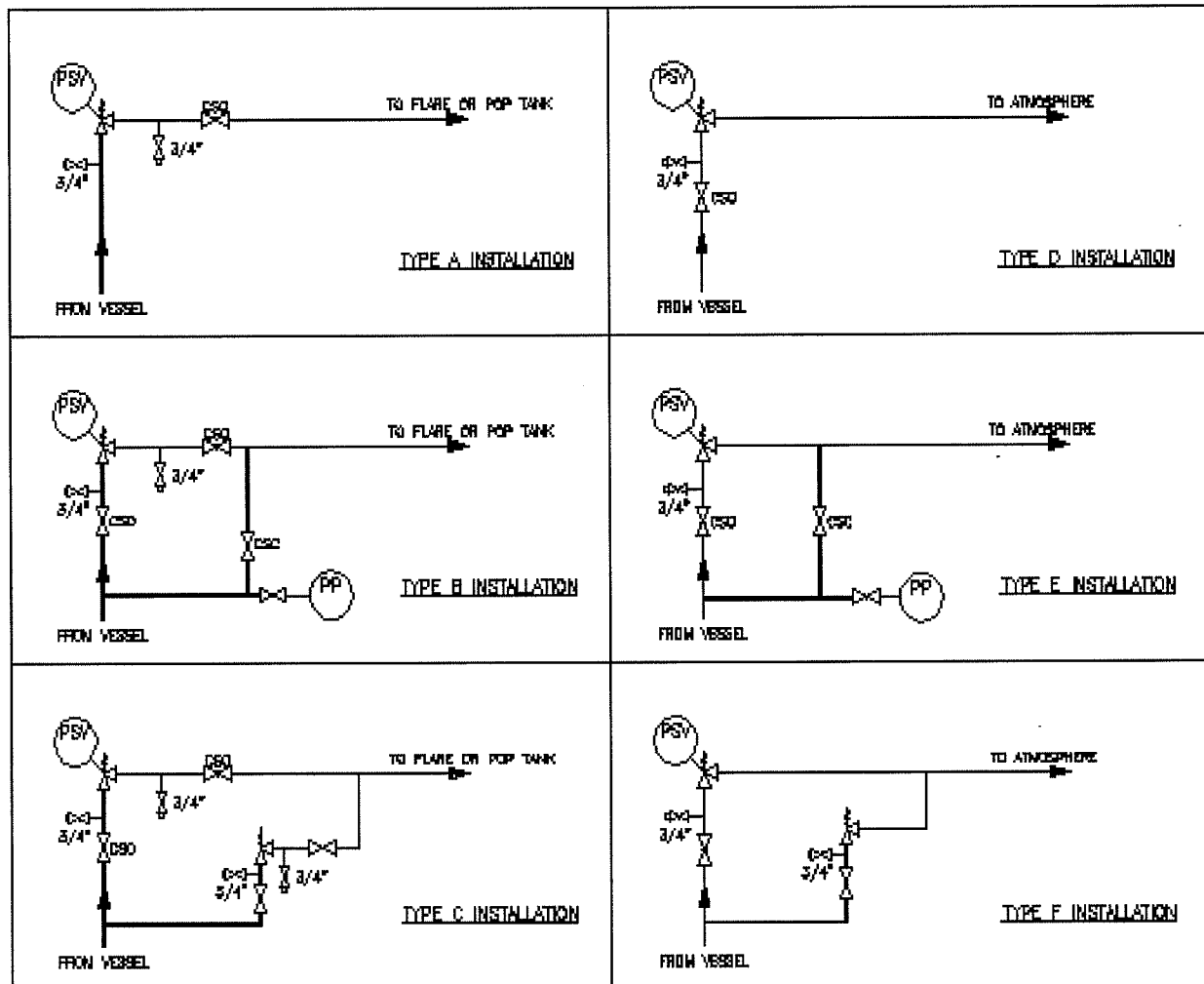


Figure #1

Program: Asset Integrity Program, Pressure Equipment, Piping, Tanks Revision: B

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Figures 17 and 18 are directly from API Recommended Practice 520:  
Sizing, Selection and Installation of Pressure Relieving Devices in Refineries  
Part 2 – Installation

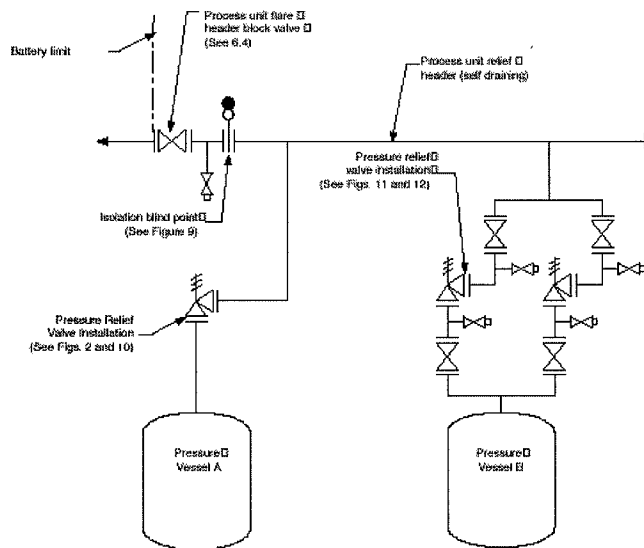


Figure 17 — Typical Flare Header Block Valves

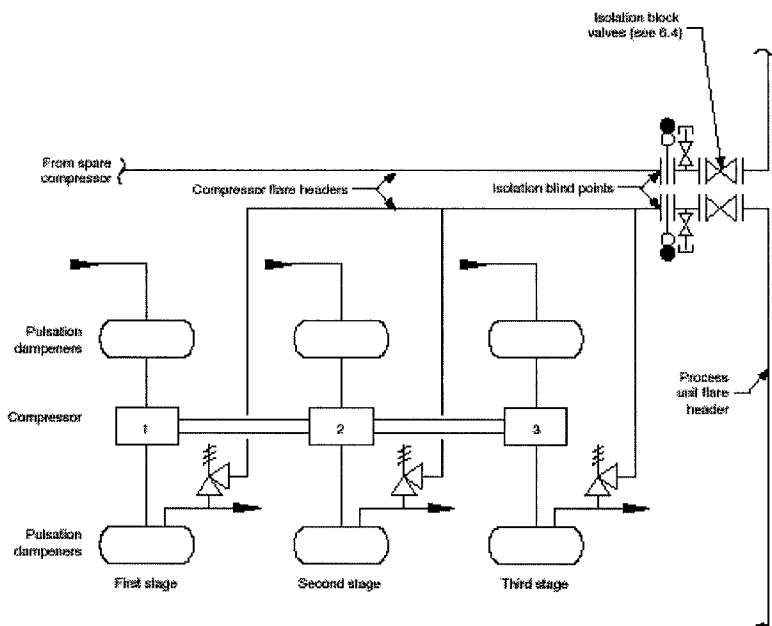


Figure 18 — Typical Isolation Block Valves for Spare Compressor

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## **MONITORING, RECORDS & FORMS**

The following records and forms are used in this procedure:

### **IBP-003a-Fa Lock-Out Status: Pressure Relief Device Isolation Valve.**

Records all pressure relief device isolation valves installed at a facility indicating their location, associated pressure relief device, "normal" position and present open/closed status. Also records verification of monthly isolation valve monitoring.

All facility pressure relief device isolation valves are monitored on a monthly basis to verify they are locked or car-sealed in the correct position. Monitoring activities are recorded on form IBP-03A-FA

### **IBP-003a-Fb PRD Isolation Valve - Operation Authorization Report**

Records the approval to close a designated pressure relief device isolation valve(s) while the equipment is to remain in operation. Approval must be signed-off by the Operation's Area Manager / Superintendent.

### **IBP-003a-Fc PSV/PRD Isolation Valve - Inventory**

Lists all PRD/PSV Isolation Valves within a given facility / location and may include all field / well site locations operated from the central operating location / main plant location.

## **OPERATING PROCEDURE** **INDIVIDUAL EQUIPMENT, UNIT , PLANT OR FACILITY SHUTDOWN**

Pressure relief device isolation valves shall be locked or car sealed in their "normal" position at all times during operation.

During an individual equipment, Unit, Plant or total Facility shutdown the pressure relief device isolation valve(s) may be placed and locked / car-sealed in the closed position to ensure positive equipment isolation from associated equipment, piping or flare systems. This will allow proper blinding and purging to occur, ensuring safe equipment outage.

The following procedure shall be followed when closing a pressure relief device isolation valve during an individual equipment, Unit, Plant or total Facility shutdown.

1. Approval to remove locks / car seals and close valves shall be by the Designated Operating Personnel only. The Designated Operating Personnel shall review the Facility Process & Instrumentation Diagrams to verify pressure relief devices proposed for isolation are not protecting associated equipment or piping that are designated to remain in operation.

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2. Designated pressure relief device isolation valves are to be positioned to the closed position only by authorized operations personnel. Isolation valve(s) shall be locked or car-sealed in the closed position.
3. New status of isolation valve(s) position shall be recorded on Form IBP-003a-Fa which shall be prominently posted in the Facility's main operating office or control room at all times.
4. Operation's "Blind List" for equipment shutdown and start-up shall indicate isolation valve closure upon equipment shutdown and verification of valve return and chain lock or car-seal in the open position prior to equipment return to service.
5. Designated pressure relief device isolation valves are to be returned to the open position only by authorized operations personnel. Isolation valve(s) shall be locked or car-sealed in the open position.
6. New status of isolation valve(s) position shall be recorded on Form IBP-003a-Fa which shall be prominently posted in the Facility's main operating office or control room at all times.

### **OPERATING PROCEDURE**

#### **ISOLATION VALVE REPOSITIONING ON OPERATING EQUIPMENT**

Pressure relief device isolation valves shall be locked or car sealed in the open position at all times during operation.

**Note :** This procedure shall only be applied to pressure relief devices equipped with the following isolation valve configurations ;

- ↙ upstream isolation valves only when pressure relief device is vented to atmosphere
- ↙ upstream and downstream isolation valves when pressure relief device is vented to a closed flare or pop-tank system

The following procedure shall be followed when closing pressure relief device isolation valve(s) on operating equipment.

1. Isolation block valve(s) on operating equipment pressure relieving device(s) shall only be operating to effect replacement or repair of an improperly operating pressure relief device(s). Review shall be completed by Operations to verify whether shut down of the operating equipment is not possible without major production or operating process impact
2. Approval to remove locks / car seals and operate isolation valve(s) on operating equipment shall be by the Operating Area Manager / Superintendent / Midstream



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Coordinator only. Authorization for operation of isolation valves shall be controlled and recorded on Form IBP-003a-Fb.

3. The Designated Operations Personnel shall review the Facility Process & Instrumentation Diagrams to verify pressure relief devices proposed for isolation are not protecting associated equipment or piping. The Designated Operations Personnel shall also verify if the subject operating equipment is protected by an "alternate" pressure relief device.
4. The Manager / Superintendent or Designated Operations Personnel shall make arrangements for new replacement pressure relief device purchase and delivery or existing pressure relief device repair and servicing to minimize isolation time period.
5. An authorized operator shall close the isolation block valve(s) and shall:
  - a) remain stationed at the equipment and monitor the system for overpressure using a calibrated pressure gauge of a range of 2 times to 4 times the pressure relief device set pressure.

The operator shall be capable of relieving pressure from the equipment by means of a vent to flare or atmosphere and / or be able to shut down the equipment, system or plant or be in constant communication with a main facility operator who can shut down the equipment, system or plant remotely, in the event that the equipment reaches its maximum allowable working pressure.

OR

- b) ensure adequate over pressure protection is provided by additional pressure relief device(s) installed on the operating equipment or its associated operating system.

Block valves installed between the operating equipment and "alternative" pressure relief device(s) shall be locked or car-sealed in the open position until the isolated pressure relief device is returned to service.

Locked / car-sealed operation block valves shall be recorded on Form IBP-003a-Fa which shall be prominently posted in the Facility's main operating office or control room.

6. New status of isolation valve(s) position shall be recorded on Form IBP-003a-Fa which shall be prominently posted in the Facility's main operating office or control room at all times. Status of subject isolation valve(s) shall also be hi-lighted in the operation's log-book until such time they are returned to the open position.
7. The replacement or repaired pressure relief device shall be installed and placed in service as soon as possible.
8. Designated pressure relief device isolation valves are to be returned to the open position only by authorized operations personnel. Isolation valve(s) shall be locked or car-sealed in the open position.

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9. New status of isolation valve(s) position shall be recorded on Form IBP-003a-Fa which shall be prominently posted in the Facility's main operating office or control room at all times.
10. Senior Operator shall complete Form IBP-003a-Fb and file in the Facility pressure relief device equipment history records and submit one copy to the Facility Lead Inspector.

**OPERATING PROCEDURE**  
**ISOLATION VALVE REPOSITIONING ON OPERATING EQUIPMENT**  
**WITH "TWINNED" PRESSURE RELIEF DEVICES**

Pressure relief device isolation valves shall be locked or car sealed in their "normal" position at all times during operation.

Note : This procedure shall only be applied to equipment with two or more pressure relief devices equipped with isolation valve(s)

The following procedure shall be followed when operating "twinning" pressure relief device isolation valve(s) on operating equipment.

1. Isolation block valve(s) on operating equipment pressure relieving device(s) shall only be operating to effect replacement or repair of an improperly operating pressure relief device(s) or to perform regular scheduled service.
2. Approval to remove locks / car seals and operate isolation valve(s) shall be by the Senior Operator only.
3. Only authorized operations personnel are allowed to reposition isolation valves.
4. Isolation valve(s) on the "spare" twinned pressure relief device shall be unlocked valve repositioned and locked or car-sealed to the open position.
5. Isolation valve(s) on the "in service" twinned pressure relief device shall be unlocked, valve repositioned and locked or car-sealed to the closed position.
6. New status of isolation valve(s) position shall be recorded on Form IBP-003a-Fa and prominently posted in the Facility's main operating office or control room at all times.



(Form # IBP-003a-Fa)

**LOCK-OUT STATUS: PRESSURE RELIEF DEVICE - ISOLATION VALVE**

<b>FACILITY NAME:</b>	<b>FACILITY LSD:</b>
<b>AREA MANAGER / SUPERINTENDENT:</b>	
<b>OPERATIONS DESIGNATE:</b>	

[illegible]

### Monthly Audit Complete with Signature of Operator

Year \_\_\_\_\_

[illegible]

# Saskatchewan



Corrections and  
Public Safety

Licensing and Inspections  
Boiler & Pressure Vessel Safety  
#330, 1855 Victoria Avenue  
REGINA, SK S4P 3V7

(306) 787-4522 Phone  
(306) 787-9273 Fax

September 28, 2004

Husky Oil  
707 – 8<sup>th</sup> Avenue  
PO Box 6525, Station D  
CALGARY AB T2P 3G7

Attn: Greg Murray, Facilities Lead Inspector

Dear Sir/Madam:

**Re: Pressure Relief Device Isolation Valve Control Program Approval:  
Husky Procedure IBP-005 Rev A  
Western Canada Facilities  
LSD: Various Locations on Attached List**

Be advised that the procedure for Pressure Relief Device Isolation Valve Control Program submitted on August 10, 2004 has been reviewed and approved.

- 1. When facilities are added to the Pressure Relief Device Isolation Valve Control Program, an updated facility list must be forwarded to this office for our records.**

Please refer to the following file number for any future reference to this program:  
**File #BV-22.**

If you require any further assistance, please contact the undersigned.

Yours truly,

Kathryn A. Black, P. Eng.  
Codes and Standards Compliance

cc: District Inspectors: James Amanie  
Neil Pinkney  
Theo Poelen  
Gord Aisman





707 8<sup>th</sup> Avenue SW  
Box 6525, Station D  
Calgary, Alberta  
T2P 3G7

Bus (Main): (403) 298-6111  
Fax (CTS): (403) 750-1960

*Sent Apr 18/05*

April 17, 2005

Saskatchewan Department of  
Correction and Public Safety  
Boilers and P.V. Safety  
3<sup>rd</sup> Floor, 1855 Victoria Avenue  
Regina SK S4P 3V7

Attention: Kathryn Black  
Codes and Standards Compliance

Dear Madam:

Re: Pressure Relief Device Isolation Valve Control – File #BV-22

Please find enclosed a Husky Energy List of Saskatchewan facilities. The list provides the manager / Superintendent responsible for implementation of the Pressure Relief Device Isolation Valve Control – File #BV-22 for each facility / area.

You have a signature page already on file for Gordon Olson, provided with the last revision of our procedure sent February 8<sup>th</sup>, 2005.

Signature pages have also been provided as requested in your last letter accepting this procedure pending receipt of these signatures.

Verification of application of this procedure within Husky, is ensured through an on-going internal audit process.

This should conclude your requirements for this procedure. Updates will be provided by Husky, as required when organizational changes take place.

If you have any concerns or questions regarding this submittal please contact me at our Calgary offices, 403 750 5013.

Greg Murray  
Coordinator  
Pressure Equipment Integrity  
Engineering and Project Management / Technical Services

FunctLocation	Description	Cost Center	User status
EC-PE-003-00001	EAGLE CREEK OIL BATTERY 15-13-039-25W3	77863	PROD
EC-PE-011-00001	MACKLIN OIL BATTERY 05-24-039-28W3	76627	PROD
EC-PE-012-00001	NORTHEND OIL BATTERY 16-20-040-28W3	76741	PROD
EC-PE-012-00002	BORDER OIL BTY 14-03-040-28W3	76740	PROD
EC-PE-012-00006	NORTHEND TEST BENCH SITE 09-16-040-28W3	76741	PROD
EC-PE-016-00001	CACTUS LAKE COMP STN 15-10-036-28W3	78062	PROD
EC-PE-017-00001	DODSLAND OIL BATTERY 13-11-032-20W3	74267	PROD
EC-PE-018-00001	WHITESIDE COMPRESSOR STN 01-05-030-25W3	74360	PROD
EC-PE-019-00001	GREENAN COMPRESSOR STN 11-12-026-16W3	74285	PROD
EC-PE-021-00001	UNITY GAS GATHERING SYSTEM LSD ?	N/A	PROD
SS-SK-001-00001	ANTELOPE OIL BATTERY 11-09-015-18W3	71226	PROD
SS-SK-002-00001	BEVERLEY WEST UNIT OB 10-13-015-17W3	71302	PROD
SS-SK-003-00001	BENCH OIL BATTERY 06-08-011-18W3	71268	PROD
SS-SK-004-00001	BONE CREEK OIL BATTERY 10-27-010-19W3	73259	PROD
SS-SK-006-00001	BUTTE VOLUNTARY OIL BATT 05-34-011-19W3	73271	PROD
SS-SK-007-00001	CANTUAR EAST UNIT OB 11-17-016-16W3	71707	PROD
SS-SK-008-00001	CANTUAR MAIN UNIT OB 15-15-016-17W3	71717	PROD
SS-SK-008-00016	CANTUAR GAS PLANT 12-02-015-17W3	71715	PROD
SS-SK-009-00001	ALAMEDA OIL BATTERY 11-23-002-34W1	71200	PROD
SS-SK-011-00001	CARNDUFF OIL BATTERY 12-19-002-33W1	73312	PROD
SS-SK-011-00002	CARNDUFF INJECTION PLANT 05-19-002-34W1	76205	PROD
SS-SK-012-00001	FLORENCE OIL BATTERY 13-22-002-34W1	71200	PROD
SS-SK-013-00001	FROBISHER OIL BATTERY 07-27-002-34W1	73337	PROD
SS-SK-014-00001	GLEN EWEN OIL BATTERY 05-28-002-33W1	71929	PROD
SS-SK-016-00001	MIDALE OIL BATTERY 03-15-002-33W1	73316	PROD
SS-SK-017-00001	OLD HIGHWAY OIL BATTERY 04-01-003-34W1	73339	SHUT
SS-SK-018-00001	RED ROOSTER OIL BATTERY 14-28-002-34W1	72462	PROD
SS-SK-019-00001	SOURIS FLATS OIL BATTERY 03-02-002-33W1	73385	PROD
SS-SK-021-00001	COOT HILL OIL BATTERY 06-14-014-33W1	71744	PROD
SS-SK-022-00001	DELTA UNIT OIL BATTERY 07-20-015-19W3	71830	PROD
SS-SK-023-00001	DIVIDE OIL BATTERY 11-03-003-24W3	72656	PROD
SS-SK-024-00001	FOSTERTON COMP STN 10-29-016-18W3	71907	PROD
SS-SK-025-00001	FOSTERTON MAIN UNIT OB 01-10-017-18W3	71913	PROD
SS-SK-028-00001	GULL LAKE NORTH OIL BATT 13-35-013-19W3	73369	PROD
SS-SK-030-00001	GULL LAKE WEST OIL BATT 10-28-013-19W3	71992	PROD
SS-SK-031-00001	GULL LAKE WEST GAS PLANT 05-09-014-19W3	71986	PROD
SS-SK-031-00002	GULL LAKE NON-UNT WTR PLT 05-09-014-19W3	75712	PROD
SS-SK-033-00001	JAVA OIL BATTERY 05-28-015-15W3	72303	PROD
SS-SK-035-00001	LYONS CREEK COMP STN 12-13-002-26W3	75669	PROD
SS-SK-036-00001	MOOSOMIN OIL BATTERY 01-29-014-31W1	72329	PROD
SS-SK-038-00001	PREMIER UNIT OIL BATTERY 16-11-015-19W3	73384	PROD
SS-SK-039-00001	RED JACKET OIL BATTERY 06-04-014-32W1	72405	PROD
SS-SK-040-00001	ROSS LAKE OIL BATTERY 04-36-013-17W3	72472	PROD
SS-SK-042-00001	SUCCESS MAIN UNIT OB 06-10-017-16W3	72507	PROD
SS-SK-043-00001	SUCCESS SOUTH UNIT OB 10-26-016-16W3	73390	PROD
SS-SK-044-00001	NORTH TOMPKINS OIL BATT 11-12-014-20W3	72524	PROD
SS-SK-044-00002	NORTH TOMPKINS H2O INJECT 11-12-014-20W3	72346	PROD
SS-SK-045-00001	SUFFIELD OIL BATTERY 16-18-014-19W3	72984	PROD
SS-SK-045-00002	SUFFIELD OIL INJECT FACIL 16-18-014-19W3	72514	PROD
SS-SK-046-00001	VERLO OIL BATTERY 05-27-016-19W3	73400	PROD
SS-SK-047-00001	WEBB OIL BATTERY 01-01-015-17W3	72621	PROD

Dave Miller  
 Gordon Olson

SS-SK-047-00004	EARVIEW COMPRESSOR STN 10-17-013-17W3	70381	PROD
SS-SK-048-00001	WYMARK COMPRESSOR STN 15-33-012-13W3	72648	PROD
SS-SK-049-00001	CARMICHAEL OIL BATTERY 13-15-011-19W3	70562	PROD
SS-SK-050-00001	ANGUS VALLEY OIL BATTERY 02-08-012-18W3	71206	PROD
SS-SK-050-00036	ANGUS VALLEY DEHY FACILITY 3-34-12-18W3	73665	PROD
SS-SK-051-00001	SHACKELTON-CS 14-36-020-19W3	70262	PROD
SS-SK-052-00001	LACADENA CS 01-19-022-17W3	70345	PROD
SS-SK-053-00001	SPRING CREEK 13-26-021-20W3	71921	PROD
SS-SK-054-00001	CADILLAC GAS GATHERIN SYS 14-03-011-12W3	72804	PROD
SS-SK-055-00001	SWIFT CURRENT HILL BTY - WATER DISPOSAL	21796	PROD
SS-SK-056-00001	SEWARD OIL BATTERY 12-07-015-15W3	73810	PROD
SS-SK-057-00001	CANTUAR EAST SHAUNAVON BTY 09-18-016-16W	73807	PROD
SS-SK-058-00001	WHITEBEAR COMP STATION 03-02-023-16W3	73979	PROD
LLOYDMINSTER-prod	BIG GULLEY O.B. 03-34-049-25W3		
LLOYDMINSTER	BIG GULLEY C.S. 07-07-050-24W3		
LLOYDMINSTER	BIG GULLEY SOUTH C.S. 14-05-050-24W3		
LLOYDMINSTER	BOLNEY O.B 01-32-052-23W3		
LLOYDMINSTER	BOLNEY 08-29-052-23W3 INJ		
LLOYDMINSTER	BOLNEY 08-32-052-23W3 INJ		
LLOYDMINSTER	BOLNEY 12-07-052-23W3 RIVER INTAKE		
LLOYDMINSTER	CELTIC C.S. 11-09-052-23W3		
LLOYDMINSTER	CELTIC WATER DISPOSAL A10-31-051-23W3		
LLOYDMINSTER	CELTIC STEAM FACILITY A5-17-052-23W3		
LLOYDMINSTER	EDAM WATER DISPOSAL A15-19-048-20W3		
LLOYDMINSTER	EPPING WATER DISPOSAL A13-17-047-27W3		
LLOYDMINSTER	FURNESS O.B. 14-17-048-27W3		
LLOYDMINSTER	GULLY LAKE O.B. 13&14-23-049-23W3		
LLOYDMINSTER	HILLMOND C.S. D8-35-051-26W3		
LLOYDMINSTER	LANDROSE O.B. 02-18-050-25W3		
LLOYDMINSTER	LASHBURN O.B. 02-02-049-24W3		
LLOYDMINSTER	LASHBURN WATER DISPOSAL A3-07-049-23W3		
LLOYDMINSTER	MARSHALL O.B. 12-07-049-26W3		
LLOYDMINSTER	MERVIN O.B. 01-35-050-21W3		
LLOYDMINSTER	MERVIN C.S. 02-26-050-21W3		
LLOYDMINSTER	NORTHMINSTER C.S. 04-34-050-27W3		
LLOYDMINSTER	PIKES PEAK O.B. 04-06-050-23W3		
LLOYDMINSTER	RUSH LAKE WATER DISPOSAL D9-06-048-21W3		
LLOYDMINSTER	RUSH LAKE WATER DISPOSAL 1A10-01-048-22W3		
LLOYDMINSTER	STANDARD HILL WATER DISPOSAL 03-35-049-22W3		
LLOYDMINSTER	TANGLEFLAGS O.B. 13-36-050-25W3		
LLOYDMINSTER	TANGLEFLAGS NORTH C.S. 10-01-051-25W3		
LLOYDMINSTER	TANGLEFLAGS SOUTH C.S. 07-25-050-25W3		
LLOYDMINSTER	TANGLEFLAGS WATER DISPOSAL 05-22-051-25W3		
LLOYDMINSTER	TANGLEFLAGS WATER DISPOSAL 11-22-051-25W3		
LLOYDMINSTER	WESTHAZEL O.B. 04-03-051-22W3		
LLOYDMINSTER	WESTHAZEL WATER DISPOSAL 13-34-050-22W3		
LLOYDMINSTER I	Sand Cavern Disposal Site 7-3--49-27w3m		
LLOYDMINSTER-pipeline	Edam Lact 9-24-48-21w3m		
LLOYDMINSTER-pipeline	Dulwich Lact 10-34-48-27w3m		
LLOYDMINSTER-pipeline	Dulwich Lact 1-26-48-27-w3m		
LLOYDMINSTER-pipeline	Easv Till Lact 15-14-50-28w3m		
LLOYDMINSTER-pipeline	Golden Lake Lact #1 14-11-48-23w3m		

Gordon  
OlsonDabir  
NagviBob  
Burrows

LLOYDMINSTER-pipeline	Golden Lake Lact #2 6-28-48-23w3m			↓ Bob Barrows ↑
LLOYDMINSTER-pipeline	HLU Lact 12-31-49-27w3m			
LLOYDMINSTER-pipeline	Maidstone Booster 9-25-47-23w3m			
LLOYDMINSTER-pipeline	Neilburg Terminal 2-13-46-26w3m			
LLOYDMINSTER-pipeline	Tangleflags Lact #3 12-6-51-24w3m			
LLOYDMINSTER-pipeline	Tangleflags Lact #4 6-24-50-25w3m			
LLOYDMINSTER-pipeline	Tangleflags Lact #5 12-24-52-25w3m			
LLOYDMINSTER-pipeline	Tangleflags Lact #6 11-32-50-25w3m			





## Facilities Engineering and Technical Services

<b>Program:</b> Asset Integrity Program, Pressure Equipment, Piping, Tanks	<b>Revision:</b> B
<b>Section:</b> IBP-003a Inspection Best Practices	<b>Revised:</b> Dec 7, 2004
<b>Name:</b> PRESSURE RELIEF DEVICE ISOLATION VALVE CONTROL	<b>Page #</b> 2 of 12

**STATEMENT OF AUTHORITY**

This document describes the systems and procedures that are implemented by Husky Energy to ensure that pressure relief device isolation valves are controlled and operated in a manner that assures the safety of personnel, equipment and the environment.

This document has the full support of Husky Energy Western Canada Upstream and Midstream Production Districts' Technical and Operations Management.

The Operating Area Technical Services Manager, assumes overall responsibility to ensure the Pressure Relief Device Isolation Valve Control Procedure is implemented and effective.

Operations Area Managers / Superintendents / Midstream Coordinator and Designated Competent Operating Personnel implement this procedure at all operating facilities where isolation valves are used.

The Lead Inspector has the authority and organizational freedom to initiate corrective action and provide solutions to problems found in the implementation of this procedure.

This procedure has the full support of the Husky Energy Western Canada Upstream Production/Management and personnel. All personnel are required to work within the requirements of this procedure, local jurisdictional regulations, codes, and standards governing their facility. Husky Energy acknowledges that the Jurisdictional Authority has the right to audit, and where applicable, revoke this procedure.

**Signatures of Review and Acceptance**

Title	Name	Signature	Date
Technical Services Manager: <i>Calgary</i>	SUSAN PRYNE	<i>[Signature]</i>	Nov 14/05
Operating Area Manager / Superintendent Equivalent: <i>EC-PE-PROVDST</i>	Dave Miller	<i>[Signature]</i>	Feb 03/05

**OPERATIONS DESIGNATE** \*\* (This signature required on Facility Copy for audit purposes)

Designated Operationing Personnel, trained and competent in the operation of facilities, sign and date at this Form on a per facility basis. The signature indicates they have read and understood the contents of this procedure and will implement all of the requirements stated.

Facility: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

This page with Engineering and Management Signatures will be posted on the Husky Intranet.

**\*\*This page must be updated or replaced when organizational changes require a new signature.**

Program:	Asset Integrity Program, Pressure Equipment, Piping, Tanks	Revision:	B
Section:	IBP-003a Inspection Best Practices	Revised:	Dec 7, 2004
Name:	PRESSURE RELIEF DEVICE ISOLATION VALVE CONTROL		Page # 2 of 12

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**Signatures of Review and Acceptance**

Title	Name	Signature	Date
Technical Services Manager: <i>Calgary</i>	<i>SIOBH PRYNE</i>	<i>[Signature]</i>	<i>Nov. 14/05</i>
Operating Area Manager / Superintendent / Equivalent: <i>Midstream Pipeline</i>	<i>Bob Burrows</i>	<i>[Signature]</i>	<i>2004-12-10</i>

**OPERATIONS DESIGNATE \*\* (This signature required on Facility Copy for audit purposes)**

Designated Operationing Personnel, trained and competent in the operation of facilities, sign and date at this Form on a per facility basis. The signature indicates they have read and understood the contents of this procedure and will implement all of the requirements stated.

Facility: COLD LAKE SYSTEM (INCLUDING DEAR TRAP, COLD LAKE TERMINAL, MORGAN, MIDPOINT, ETC. ETC.)

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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### Signatures of Review and Acceptance

Title	Name	Signature	Date
Technical Services Manager:	<i>Susan Pinc</i>	<i>Susan Pinc</i>	Mar. 14/05
Operating Area Manager / Superintendent / Equivalent:	DABIR NAQVI	<i>Dabir Naqvi</i>	2005-01-28

### OPERATIONS DESIGNATE **\*\***(This signature required on Facility Copy for audit purposes)

Designated Operationing Personnel, trained and competent in the operation of facilities, sign and date at this Form on a per facility basis. The signature indicates they have read and understood the contents of this procedure and will implement all of the requirements stated.

Facility: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**PRESSURE RELIEF DEVICE ISOLATION VALVE  
IN-SERVICE OPERATION AUTHORIZATION RECORD** *Form # IBP-003a-Fb*

<b>Facility Name</b>	<b>Facility LSD</b>
<b>Area Manager / Superintendent</b>	<b>Operations Designate:</b>

**STATIC DATA**

<b>PRD TAG #</b>	<b>PRD Location</b>	<b>PRD Type:</b>
<b>Protected Equipment</b>		<b>Service: Sweet</b> <input type="checkbox"/> <b>Sour</b> <input type="checkbox"/>
<b>Inlet Isolation Valve Tag #</b>	<b>Outlet Isolation Valve Tag #</b>	

**REASON FOR ISOLATION**

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**ALTERNATE MEANS OF OVERPRESSURE PROTECTION**

<b>Isolation Procedure Number</b>		
<b>Manned Bypass</b> <input type="checkbox"/>	<b>Manned Vent</b> <input type="checkbox"/>	<b>Parallel Loop</b> <input type="checkbox"/>
<b>Spared Capacity</b> <input type="checkbox"/>	<b>Other :</b>	

**APPROVALS**

<b>TO BE COMPLETED PRIOR TO ISOLATION</b>				<b>APPROVED</b>	
<b>Area Manager/ Superintendent</b>		<b>Date</b>		<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Operator Designate</b>		<b>Date</b>		<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Responsible Technical Discipline</b>		<b>Date</b>		<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>

**ISOLATION**

<b>1. Alternate Protection in Place</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	
<b>2. Isolation Valves Closed &amp; Car-Sealed</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	
<b>3. Operational Requirements Met</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	
<b>4. Isolation Recorded in Operation Log</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	
<b>5. Pressure Relief Device Replaced</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	
<b>6. Installation Inspected</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator or Inspector Signature</b>	<b>Date</b>	
<b>7. Isolation Valves Open &amp; Car-Sealed</b>	<b>YES</b> <input type="checkbox"/>	<b>Operator Signature</b>	<b>Date</b>	

**DAILY MONITORING & STATUS**

*Operations shall initial below each shift throughout the duration the pressure relief device remains isolated to ensure each shift is aware of isolation and related operational requirements to be met.*

<b>Shift/Date</b>						
<b>Operations Designate</b>						

