

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Flag, Bypass and Monitor Procedure

Contents

Introduction	1
Definitions.....	1
The Regulations.....	2
30 CFR 250.803(c)(1)	2
30 CFR 250.1004(c)	2
Regulatory Clarity	2
Flag.....	2
Minimum Number of Devices.....	2
Monitor and Control	2
ChevronTexaco GOM Flag-Bypass-Monitor System Requirements	2
Flags	3
Bypass procedures.....	3
Examples of devices that can be bypassed	3
Examples of methods of bypassing.....	3
Site Specific Monitoring Procedures	5
Remote Monitoring of Bypassed Devices	5
Variances.....	5
Special Circumstances.....	6
Boat dock ESD station/loop block valves.....	6
MMS Inspection	6
Flag/Tag and Label Specifications	6
Vendor for Flags and Boards.....	7
Frequently Asked Questions.....	7

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Flag, Bypass and Monitor Procedure

While performing services for ChevronTexaco Exploration and Production Company it is the Contractor's responsibility to ensure that all work is performed safely and in full compliance all applicable rules, regulations and policies.

Introduction

This guidance is provided to ensure that all field personnel comply with the regulations as found at 30 CFR 250.803(c) (1) and 30 CFR 250.1004 (c). INCs issued against these regulations could result in significant civil penalties, and if found to be a deliberate violation, could escalate into a criminal violation; however, of greater concern is the potential negative ramifications of the safety and health of our personnel.

Definitions

In-service – the device or component is performing its designed function.

Bypass – to block-out or disable a Safety Device so that it will not perform its designed function.

Maintenance – adjustments or repairs, typically of short duration, that can be performed without compromising effective monitoring. (i.e. leaving the area for parts, supplies, or tools). For clarification, discuss with your supervisor.

Qualified Person – A person that has successfully completed a production safety system training program (e.g. ERTC's PSST) and is familiar with the site specific monitoring procedures of that facility. Any person that has not received the required training must be directly supervised by a Qualified Person when engaged in installing, testing, inspecting, flagging, bypassing, monitoring or maintaining safety devices.

Out-of-Service – A component is Out-of-Service (OOS) when it is not being used as part of the production process and it is properly isolated from all other production equipment or energy sources on the facility. Safety Devices for an out of service component must be labeled "Out-of-Service". It is not necessary to monitor the bypassed Safety Device function. However, the PSV on any Out-of-Service component must be left In Service, maintained and tested.

Properly Isolated as per 30 CFR 250.803(c) (2), (3)

When wells are disconnected from producing facilities and blind flanged, equipped with a tubing plug, or the master valves have been locked closed, compliance is not required with the provisions of API RP 14C or this regulation concerning the following:

- (i) Automatic fail-close SSV's on wellhead assemblies, and*
- (ii) The PSH and PSL shut-in sensors in flowlines from wells.*

When pressure or atmospheric vessels are isolated from production facilities (e.g., inlet valve locked closed or inlet blind-flanged) and are to remain isolated for an extended period of time, safety device compliance with API RP 14C or this subpart is not required.

Temporarily Out-of-Service – A component is Temporarily Out-of-Service when it is in standby, shut-down or not in use (i.e. test separators, intermediate pressure vessels, etc) but can easily be placed in service. Components are NOT isolated from production facilities as per 30 CFR 250.803(c). In this situation, Safety Devices that have been bypassed must be flagged with temporarily out of service tags. The Safety Device functions do not have to be monitored but must be tested and maintained in accordance with API RP 14C.

Flag / Tag – A hanging, removable placard that identifies the status of a safety device. Tags should only be used on bypassed or Temporarily Out-of-Service devices or components.

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Label – A placard permanently affixed (glued, stuck, stenciled, screwed) to the panel, device, or component for identification of the device and/or service status.

The Regulations

30 CFR 250.803(c)(1)

Surface or subsurface safety devices shall not be bypassed or blocked out of service unless they are temporarily out of service for startup, maintenance, or testing procedures. Only the minimum number of safety devices shall be taken out of service. Personnel shall monitor the bypassed or blocked-out functions until the safety devices are placed back in service. Any surface or subsurface safety device which is temporarily out of service shall be flagged.

30 CFR 250.1004(c)

If the required safety equipment is rendered ineffective or removed from service on pipelines which are continued in operation, an equivalent degree of safety shall be provided. The safety equipment shall be identified by the placement of a sign on the equipment stating that the equipment is rendered ineffective or removed from service.

Regulatory Clarity

Flag

Any surface or subsurface safety device which is temporarily out of service shall be flagged. The purpose for flagging is:

- To be in compliance with the regulations.
- To be a visual reminder / alert to all personnel that a safety device is in "bypass".

Minimum Number of Devices

You may only bypass safety devices required to allow the start-up, testing, or maintenance task to be performed. Although it may be convenient to use a "Group Bypass" or to bypass extra safety devices to prevent nuisance shut-ins, use of such group devices would be a clear violation of bypassing more than the minimum.

As soon as the task is completed, the safety device or devices must be placed back in service and the flag / tag removed.

Monitor and Control

Personnel shall monitor the bypassed or blocked-out functions until the safety devices are placed back in service. An operator shall be in a position to monitor the function of the bypassed device. If you detect an abnormal condition then you must take corrective action (close inlet valve, ESD platform, etc.) to prevent an undesirable event.

ChevronTexaco GOM Flag-Bypass-Monitor System Requirements

Note: This system is not intended to replace the Lock Out / Tag Out (LOTO) System. However, on occasion it may be used in conjunction with the LOTO system.

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Flags

Flags will be made available in the following two methods:

1. PERSONAL TAGS - tags will be provided to each qualified person

Each Operations Supervisor will provide a sufficient number of bypass flags/tags to each qualified person. These flags/tags should be accounted for at the end of each day.

There are several benefits to doing this:

- To provide immediate availability of flags/tags
- To provide built-in compliance that "only a minimum number of devices" be bypassed
- To serve as a reminder to the qualified person to review the day's work and account for all flagged devices placed in bypass.

2. BYPASS TAG BOARDS - Bypass board(s) will be located at each facility in the main office, gauger shack or at the panels, which ever is deemed most effective by the work group.

There are several benefits to doing this:

- Flags are readily accessible any time a Safety Device needs to be bypassed.
- To visually alert personnel of a device in bypass if a flag/tag is missing from its hanger.
- To serve as a reminder to all personnel to review the day's work and account for all flagged devices placed in bypass.

Bypass procedures

Flag – Bypass – Monitor – Return to Service

The following procedures shall be used when placing a Safety Device in bypass:

- Notify all affected personnel
- Flag Safety Device to be bypassed
- Bypass Safety Device
- Monitor the bypassed or blocked-out functions
- Complete start-up, maintenance, or testing
- Return Safety Device to service
- Remove the bypass flag
- Notify all affected personnel

Secondary Flagging

If a safety device is bypassed in such a manner that its condition or operating mode is not clearly visible then a second flagging device will be installed on the front of the associated control panel so that it is clearly visible. (i.e. devices/isolation valve inside control panel, slave panels, plugged relay ports, boat landing ESD, etc.)

Examples of devices that can be bypassed

Devices that may be bypassed include but are not limited to:

- Pressure Safety Valves (PSV)
WARNING NEVER FOR START-UP

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

- Pressure Vacuum Safety Valves (PVSV)
WARNING NEVER FOR START-UP
- Shutdown Valves (SDV)
- Surface Controlled Subsurface Safety Valves (SCSSV)
- Surface Safety Valves (SSV)
- Level Safety High / Low (LSHL)
- Pressure Safety High / Low (PSHL)
- Flow Safety High / Low (FSHL)
- Burner Safety Low (BSL)
- Temperature Safety High / Low (TSHL)
- Fog Horn
- Boat landing ESD station/loop*
- Combustible Gas Detectors (ASH)
- H2S Detectors (OSH)
- SO2 Detectors (OSH)
- Platform ESD system
- TSE System
- Containment System
- Sump Pump
- Safety Device Group
- Fire Pump
- Ultraviolet Infrared Detector (USH)
- Smoke Detector (YSH)
- Thermal Detector (TSH)
- Toxic Gas Detector (OSH)

* See Special Circumstances below.

Examples of methods of bypassing

Any control device or equipment that is used to bypass a Safety Device must be flagged. This equipment includes but is not limited to:

- Electrical jumper lines
- Pneumatic jumper lines
- Remote SCADA system
- Local SCADA system
- Control panel "Bypass" / "In-Service" selector valves
- Block valves under PSV
- Isolation valve for the SCSSV at wellhead
- Isolation valve for SCSSV in hydraulic control panel
- SCSSV hydraulic dump valve manual override
- Fusible caps on the SSV
- Manual override wheels for SSVs/SDVs/BDVs
- Pneumatic relay chocks
- Isolation valves for LSHL
- Sensing line selector valves for PSHL testing
- Terminal valves for PSHL sensing lines
- Pinned relay
- Boat landing ESD isolation valve
- Three way valve on SSV /SDV / BDV (trapped pressure)
- Hand / Off / Automatic switch
- Breakers
- Plugged bleed ports
- Block valves on supply system (sump pump)
- Electrical leads for power supply (fog horn)
- Timers (fog horn)
- Plumber's plug (deck drains)

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Site Specific Monitoring Procedures

When an operator is "monitoring" a bypassed Safety Device, he or she is in effect taking the place of the Safety Device and must be able to manually provide the same level of protection in a timely manner to prevent an undesirable event.

Previous mindsets have described monitoring as "same platform / same deck." However, this may not be the best position to observe the process variable (i.e. level, pressure, etc.)

Qualified personnel of the facility shall determine the process, procedures and number of personnel required to provide "effective monitoring" for each Safety Device that is placed in bypass.

Qualified personnel bypassing safety devices will be responsible for answering the following questions:

- What is the process variable to be monitored?
- What device will be used to monitor the process variable?
- How will the process be controlled?
- At what point must I react to prevent an undesirable event?
- Will this procedure provide the same level of protection as the Safety Device?
- How many people are required?

These are the types of questions you will be asked by your supervisor or MMS representative.

Remote Monitoring of Bypassed Devices

The only time that bypassed safety devices can be remotely monitored is when all conditions in the Remote Control section of the GOM Regulatory Guidance - Remote Operations via SCADA apply. These conditions are:

- The remote operator must place the device in bypass.
- This can only be done as part of a reset or startup activity.
- Radio communications must be maintained between the local and remote operator at all times.
- The scan time of the applicable SCADA system must be increased to one scan per 30 seconds, not to exceed one scan per 60 seconds.
- The remote operator can only monitor a minimum number of devices. If multiple devices are monitored, the remote operator shall be able to view the appropriate data on one SCADA screen.
- After the bypass device has cleared, it must be returned to service immediately after the process has stabilized.
- Other site-specific guidelines may be required. These should be documented and maintained at the remote control facility.
- Remote Monitoring of mechanically disabled safety devices (i.e. "pinning" a pneumatic relay") is not allowed by NTL 2002-G03.

Additional remote monitoring and control guidance can be found in the *GOM Regulatory Guidance - Remote Operations via SCADA* in the *Operations Manual*. (See link below) This guidance was developed by GOM Electrical Engineering and HES Subject Matter Experts and is based on NTL G03-2002.

Contact your local Profit Center HES Specialists for guidance.

Variations

There are NO exceptions to flagging a bypassed Safety Device. This includes MMS inspections, internal company inspections and monthly inspections.

There are no variations for the tags specifications.

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Applying a bypass flag is not required for self-flagging devices (i.e. Quick Panels with external visual indicator(s) and lamp test functionality, SCADA screens). If your electronic safety system does not give a clear, visual indication of bypassed devices at all times, then you must apply bypass flags to screen and/or the end device.

At non-OCS locations, reasons for variances from this flagging standard must be documented by the appropriate area / location and approved by their respective Operations Manager, Asset Team Leader, or equivalent.

Special Circumstances

Boat dock ESD station/loop block valves

It is common for locations to have a departure from the MMS to install a block valve in the boat landing ESD supply line. Such departures typically allow for these valves to be closed during inclement weather. They do not need to be attended **but they must be flagged**. Block valves in the boat landing ESD supply line must be tie-wrapped (locked) in the open position at all other times.

Note: This requires an MMS departure with specific conditions that must be met.

MMS Inspection

Should the MMS arrive while a safety device(s) is bypassed, immediately notify the MMS Representative of all device(s) that are flagged and bypassed, why they are bypassed and how they are being monitored.

Tag and Label Specifications

The following standard "flagging" protocol shall be implemented at all ChevronTexaco GOM facilities:

- Bypass Tag
 - Shape: Round
 - Size: 2 ½"
 - Background Color: Bright Orange
 - Lettering: White – "BYPASS"
- Temporarily Out-of-Service Tag
 - Shape: Rectangular
 - Size: 2" X 4"
 - Background Color: Yellow
 - Lettering: Black – "Temporarily Out-of-Service"
- Out-of-Service Label (for panel boards)
 - Shape: Rectangular
 - Size: Panel specific
 - Background Color: Black
 - Lettering: White – "Out-of-Service"
- Out-of-Service Label (for components / vessels)

Black spray paint stenciling is acceptable for out-of-service components

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

Vendor for Tags and Boards

Tags may be purchased from the following approved vendor:

Ed Smith Stencil Works
326 Camp Street
New Orleans, LA 70130
Phone (504) 525-2128
Fax (504) 525-2157
E-mail edsmiths@bellsouth.net
Web: www.edsmiths.com

The above vendor is familiar with the specs of ChevronTexaco's GOM standard bypass tags.

Frequently Asked Questions

- What should I do with all the flagging material and other tags previously used to Flag BYPASSED devices?
- What is the definition of Temporarily Out Of Service (TOOS)?
- What are the specifications for these tags?
- What tags did the FBM Team provide to the field?
- What about the Out of Service Tag?
- What is the definition of Out Of Service (OOS)?
- Where do I get more tags?
- What tag should be used when bypassing the boat landing ESD block valves for inclement weather?
- When I go to an unmanned platform, I place a BYPASS Tag on the Fog Horn Switch and arm the timer to shut off the horn. When I leave, I want to cancel the timer to place the horn back in service. How can I do this without damaging the timer?
- As an electrician, I do not like to hang metal from my belt loop. Do I have to wear the personal BYPASS tags with the stainless steel clip?
- Can I hang more than one BYPASS tag per hook on the BYPASS board?
- Can I hang the temporarily Out Of Service Tag on the BYPASS Board?
- Does FBM replace LOTO?
- Is there a limit to the number of BYPASS Boards I can have on my platform?
- I work on a complex of platforms connected by catwalks (bridges). I am accustomed to using the BYPASS Board, why do I need personal tags?
- I work on a platform that has quick panels, how do I flag those?
- I would like to use SCADA to monitor the variable (pressure, liquid level, etc.) when the safety device is in bypass. What are the requirements and/or guidelines?
- Can you monitor bypassed Safety Device functions from a SCADA computer that is on the same platform as the bypass
- If you have a 15 minute bypass timer on individual components of a safety system, do we have to be in the vicinity to monitor

Q: What should I do with all the flagging material and other tags previously used to Flag BYPASSED devices?

A: Properly discard them.

There are two (2) tags associated with FBM, the **BYPASS** Tag used when bypassing devices for start-up, testing, and maintenance of the safety system. When a device or component is temporarily placed out of service (e.g. test separator), then the **Temporarily Out Of Service (TOOS) Tag** is used.

Q: What is the definition of Temporarily Out Of Service (TOOS)?

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

A: A component is temporarily Out-of-Service when it is in standby, shut-down or not in use (i.e. test separators, intermediate pressure vessels, etc) but can easily be placed in service. Components are NOT isolated from production facilities as per 30 CFR 250.803(c). In this situation, Safety Devices that have been bypassed must be flagged with temporarily out of service tags. The Safety Device functions do not have to be monitored but must be tested and maintained in accordance with API RP 14C.

Q: What are the specifications for these tags?

A: Bypass Tag

- Shape: Round
- Size: 2 ½"
- Background Color: Bright Orange
- Lettering: White – "BYPASS"

Temporarily Out-of-Service Tag

- Shape: Rectangular
- Size: 2" X 4"
- Background Color: Yellow
- Lettering: Black – "Temporarily Out-of-Service"

Q: What tags did the FBM Team provide to the field?

A: The BYPASS Tag, and the Temporarily Out Of Service Tag.

Q: What about the Out of Service Tag?

A: These are available and/or provided by the field. Acceptable specifications are:

- Out-of-Service Label (for panel boards)
- Shape: Rectangular
- Size: Panel specific
- Background Color: Black
- Lettering: White – "Out-of-Service"
- Out-of-Service Label (for components / vessels)
- Black spray paint stenciling is acceptable for out-of-service components

Q: What is the definition of Out Of Service (OOS)?

A: A component is Out-of-Service (OOS) when it is not being used as part of the production process and it is properly isolated from all other production equipment or energy sources on the facility. Safety Devices for an out of service component must be labeled "Out-of-Service". It is not necessary to monitor the bypassed Safety Device function. However, the PSV on any Out-of-Service component must be left In Service, maintained and tested.

Properly Isolated as per 30 CFR 250.803(c) (2), (3)

When wells are disconnected from producing facilities and blind flanged, equipped with a tubing plug, or the master valves have been locked closed, compliance is not required with the provisions of API RP 14C or this regulation concerning the following:

(i) Automatic fail-close SSV's on wellhead assemblies, and

(ii) The PSH and PSL shut-in sensors in flowlines from wells.

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

When pressure or atmospheric vessels are isolated from production facilities (e.g., inlet valve locked closed or inlet blind-flanged) and are to remain isolated for an extended period of time, safety device compliance with API RP 14C or this subpart is not required.

Q: Where do I get more tags?

A: Ed Smith Stencil Works
326 Camp Street
New Orleans, LA 70130
Phone (504) 525-2128
Fax (504) 525-2157
E-mail edsmiths@bellsouth.net
Web: www.edsmiths.com

Q: What tag should be used when bypassing the boat landing ESD block valves for inclement weather?

A: The Bypass Tag. Even though this is not considered testing, maintenance or start-up it is an exception as stated in the guidance document and your MMS waiver should support the flagging requirement with no monitoring required. When the block valve is closed you are bypassing the function of that particular ESD station. If a safety device is bypassed in such a manner that its condition or operating mode is not clearly visible then a second flagging device will be installed on the front of the associated control panel so that it is clearly visible. (i.e. devices/isolation valve inside control panel, slave panels, plugged relay ports, boat landing ESD, etc.)

Q: When I go to an unmanned platform, I place a BYPASS Tag on the Fog Horn Switch and arm the timer to shut off the horn. When I leave, I want to cancel the timer to place the horn back in service. How can I do this without damaging the timer?

A: Response from Lenny Larre: Murphy Timers need to be cancelled before leaving. The correct way to set the timer is to turn it all the way to 12 hours then back off to desired time. This action puts tension on the spring, the timer may not work properly if this is not done. As far as it stripping the timer mechanism, the Timer is designed to turn back, if necessary, all the way back to zero. Please have any failed timer sent to Harvey Terminal. I'll send it back to Murphy for a thorough analysis.

Q: As an electrician, I do not like to hang metal from my belt loop. Do I have to wear the personal BYPASS tags with the stainless steel clip?

A: NO.

They are your tags; you can have them in your tool bag, back pack, etc. The process does not mandate that they be worn on belt loops.

Q: Can I hang more than one BYPASS tag per hook on the BYPASS board?

A: NO.

The BYPASS board is designed so that when the BYPASS tag is removed a ? appears to prompt you.... Where is the tag?

Q: Can I hang the temporarily Out Of Service Tag on the BYPASS Board?

A: NO

Q: Does FBM replace LOTO?

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

A: NO.

They are separate processes and procedures. However, on occasion FBM may be used in conjunction with the LOTO system.

Q: Is there a limit to the number of BYPASS Boards I can have on my platform?

A: NO.

Keep in mind that you don't want so many tags that you are unable to account for them. Also the regulations require that we bypass the minimum number of devices.

Q: I work on a complex of platforms connected by catwalks (bridges). I am accustomed to using the BYPASS Board, why do I need personal tags?

A: As per the FBM guidance in the Operations Manual, BYPASS tags will be made available in the following two methods:

- Personal BYPASS Tags – These tags should be accounted for at the end of each day.
- BYPASS Boards – Located at each facility in the main office, gaugers shack or at the panels, whichever is deemed most effective by the workgroup.

There is no requirement for you to hang the personal tags on your person, you can have them in your tool bag, back pack, etc. If you never use your personal tags then you account for them at all times, perhaps they are kept in your tool bag. In the event you have to go out into the field to check on a satellite well, you would have your personal tags with you to apply prior to bypassing a safety device. Experience has shown that if you do not have them with you, you are tempted to bypass without flagging and are likely to forget the safety device in bypass.

Also, having personal bypass tags will enable you to flag valves for a device you may be testing or repairing (i.e. on the valves of a LSH that you take out of service for repair or cleaning). Having the tags in your possession at the time of the test or repair makes it easier to use them as a reminder that a valve is bypassed.

Q: I work on a platform that has quick panels, how do I flag those?

A: Some quick panels (touch screens) show that the device is in bypass but when you leave that particular screen you no longer have a visual indication that something is in bypass. For that reason, the FBM team recommended to the GOM I&E group that any future design for new or updated safety systems must include an external visual indicator with lamp test functionality that always shows a device in bypass no matter what screen you move to. Some systems may have a "bypass" dialog box that carries over to other screen as you scroll through to remind you that something is in bypass in the system. If your electronic safety system does not give a clear, visual indication of bypassed devices at all times, then you must apply bypass flags to the screen and/or the end device. Some locations flag the touch screen that is closest to the device bypassed, i.e. pressure transmitter and they also place a Bypass Tag on the transmitter. You might need to place Velcro on the screen, drill a hole, or fashion some other way to hang the bypass tag. Plan ahead for this because the lack of having a suitable place to hang the bypass tag may be the barrier to Flagging It First!

Q: I would like to use SCADA to monitor the variable (pressure, liquid level, etc.) when the safety device is in bypass. What are the requirements and/or guidelines?

A: The only time that bypassed safety devices can be remotely monitored is when all conditions in this Remote Control Section of the "Regulatory Guidance – Remote Operations via SCADA" are met.

Remote Control

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

MMS NTL No. 2002-G03 and the ChevronTexaco Interpretation of NTL No. 2002-G03 specify that you must meet at the minimum the following requirements in order to control production facilities remotely (this applies to all remote control including hurricane evacuations).

- You must request permission in writing and receive approval to remotely control the facility from your district MMS office. You should maintain a copy of the permit request and approval at the offshore facility, the primary offshore control room responsible for the facility and in the hurricane evacuation control room.
- The SCADA system must be capable of monitoring all essential operating conditions that affect the subject wells, pipelines, and process components.
- If the primary cause of the shut-in cannot be ascertained via the SCADA system, an on-site investigation of the remote facility shall be conducted before any further remote control start-ups are attempted.
- API RP 14 C devices may be bypassed using SCADA per the following.
 - a. The remote operator and SCADA system ensures that the system pressure does not exceed the MAOP/MAWP of the system's limiting component.
 - b. The operator continuously monitors all essential operating parameters.
 - c. Safety devices may not be bypassed for more than 30 minutes (internal timer). Additionally, the operator has to issue a reset command at least once every five minutes during this 30-minute cycle to keep the 30-minute reset timer active or the bypass function will drop out. There is no limit to the number of 30-minute attempts. However, the system has to completely shut-in and reaches a static state before the next 30-minute attempt is initiated. See the ChevronTexaco Interpretation of NTL No. 2002-G03 for more details.
 - d. PSL upsets that because a platform shut-in (PSL First Outs) cannot be remotely bypassed. After initiating an approved reset attempt, a PSL First Out that was received during the reset process because the 5-minute timer was allowed to expire shall **NOT** prohibit the remote operation process. If the 30-minute timer expires with a PSL, it will prohibit the remote operation process. If 30 minutes is not adequate to bring the system on line, a departure (with supporting data) should be requested from the MMS to extend the 30-minute timer. PSL devices that are not First Outs as explained above can be bypassed. See the ChevronTexaco Interpretation of NTL No. 2002-G03 for more details.
 - e. Tripped flow line and pipeline PSH devices shall prohibit remote control of all equipment that the SAFE Chart requires to be affected while tripped. If the PSH device(s) clears, remote control will be permitted. Tripped PSH devices on all other process components may be bypassed. See the ChevronTexaco Interpretation of NTL No. 2002-G03 for more details.
 - f. LSH devices can be bypassed except on sump tanks/piles, water skimmers, flare scrubbers, and stock tanks. Tripped LSH devices on Sump tanks/piles, water skimmers, flare scrubbers, and stock tanks shall prohibit remote control of all equipment that the SAFE Chart requires to be effected.
 - g. Tripped LSL devices shall prohibit remote control for all equipment that the SAFE Chart requires to be affected.
 - h. Tripped ESD/TSE/TSH devices shall prohibit remote control for all equipment that the SAFE Chart requires to be affected. ESD and Storm Timer commands shall not be affected by the position of the local/remote switch. ESD and Storm Timer Commands shall work in either mode.
 - i. Compressors and all fired components cannot be remotely controlled unless explicit written approval from the appropriate MMS District Supervisor is granted. You should maintain a copy of the permit request and approval at the offshore location, any offshore control room responsible for the facility and in the hurricane evacuation control room.
 - j. A SCADA system Local/Remote button is not considered part of the Lock Out/Tag Out process because it can be potentially remotely overridden. Anytime work is conducted on a facility that is remotely controlled, all equipment should be locked and tagged out as if it were a manned location.
- 5. All safety system devices and their associated electronic, electrical, pneumatic, and/or hydraulic circuitry shall be fail-safe.
 - The operator of the SCADA system shall be qualified and knowledgeable of the specific SCADA system and its related production process systems.

ChevronTexaco Gulf of Mexico Contractors Programs & Policies

- Any system capable of electronic data storage shall record operator interventions.

And the following additional guidelines.

- The remote operator must place the device in bypass.
- This can only be done as part of a reset or startup activity.
- Radio communications must be maintained between the local and remote operator at all times.
- The scan time of the applicable SCADA system must be increased to one scan per 30 seconds, not to exceed one scan per 60 seconds.
- The remote operator can only monitor a minimum number of devices. If multiple devices are monitored, the remote operator shall be able to view the appropriate data on one SCADA screen.
- After the bypass device has cleared, it must be returned to service immediately after the process has stabilized.
- Other site-specific guidelines may be required. These should be documented and maintained at the remote control facility.
- Remote Monitoring of mechanically disabled safety devices (i.e. "pinning" a pneumatic relay") is not allowed by NTL 2002-G03.

Q: Can you monitor bypassed Safety Device functions from a SCADA computer that is on the same platform as the bypass?

A: Yes. If the SCADA Computer allows the operator to monitor all needed information, for example the level of the vessel if a LSH is bypassed, and the operator can take action from the computer to remove the device from bypass or shut in the process. Basically, the SCADA computer has to be able to complete function as the primary "panel" for monitoring and controlling the safety device. If the computer only allows the operator to see the status of the device, not the analog information, or doesn't allow the operator to take action if something goes wrong, I would say no it can't be monitored

Q: If you have a 15 minute bypass timer on individual components of a safety system, do we have to be in the vicinity to monitor?

A: Personnel shall monitor the bypassed or blocked-out functions until the safety devices are placed back in service. An operator shall be in a position to monitor the function of the bypassed device. If you detect an abnormal condition then you must take corrective action (close inlet valve, ESD platform, etc.) to prevent an undesirable event. When an operator is "monitoring" a bypassed Safety Device, he or she is in effect taking the place of the Safety Device and must be able to manually provide the same level of protection in a timely manner to prevent an undesirable event.

Previous mindsets have described monitoring as "same platform / same deck." However, this may not be the best position to observe the process variable (i.e. level, pressure, etc.) Qualified personnel of the facility shall determine the process, procedures and number of personnel required to provide "effective monitoring" for each Safety Device that is placed in bypass. Qualified personnel bypassing safety devices will be responsible for answering the following questions:

- What is the process variable to be monitored?
- What device will be used to monitor the process variable?
- How will the process be controlled?
- At what point must I react to prevent an undesirable event?
- Will this procedure provide the same level of protection as the Safety Device?
- How many people are required?