Control Room Management mini-series

Episode 1: Scope & Applicability

49 CFR 192.631(a) and 195.446(a)

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Episode Overview

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Why This Episode Matters

Determining applicability is the foundational step for any CRM program. If the rule doesn't apply, you can stop here. If it does, accuracy in defining scope drives all downstream compliance efforts and safety protocols.

In This Episode

- Regulatory Foundation & Triggers
- Applicability: SCADA + Control Room
- Hazardous Liquids: No Exceptions
- Definitions: "Control Room" & "Controller"
- Gas Exceptions & Limited Scope
- Top 3 Action Items

Regulatory Foundation

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49 CFR §192.631(a)

Code of Federal Regulations

Scope & Applicability

Natural Gas

49 CFR §195.446(a)

Code of Federal Regulations

Scope & Applicability

Hazardous Liquids

Purpose & Audit Focus

Establish applicability based on facility and control room structure:

- Define Applicability
- Facilities Review
- Control Room Structure
- Written Procedures
- Determine Scope
- Operator Obligations

Key Definitions

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Control Room

An operations center staffed by personnel charged with the responsibility for remotely monitoring and controlling a pipeline facility.

- ✓ Function-Based: Defined by what happens there, not by security or location.
- ✓ Examples: Can be a secure center, an office cubicle, a manager's office, or a compressor station building.
- ✓ Key Test: Is remote monitoring and control executed here?

Controller

A qualified individual who remotely monitors and controls safety-related operations of a pipeline facility via a SCADA system.

- ✓ Authority: Possesses operational authority and accountability for remote functions.
- ✓ Inclusion: Includes those who monitor SCADA and direct field technicians to take action.
- ✓ Requirement: Must be qualified for the tasks they perform.

When Does CRM Apply?

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The Applicability Trigger

The regulation applies if you have a Controller working in a Control Room who monitors and controls all or part of a pipeline facility through a SCADA system.

CRM Does NOT Apply

If your operation lacks these core components:

- No SCADA system used for control
- No defined Control Room
- No personnel with authority to control via SCADA

CRM DOES Apply

If regulated facilities exist with remote control capability:

- Begin formal applicability review
- Document scope decisions
- Identify all applicable locations (offices, stations, etc.)

Gas Pipeline Exceptions

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Gas Distribution

Services Threshold

Fewer than 250,000 services
(Reported on PHMSA Annual Report)

Gas Transmission

Compression Rule

Operating without SCADA-enabled compressor stations
(49 CFR 192.631(a)(1))

Why These Exceptions?

PHMSA views service count and remote compression capability as key indicators of operational complexity and risk.

- Risk-Based Approach
- Complexity Index
- Limited Scope Applies

Limited Scope Requirements

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If you qualify for gas exceptions (192.631(a)(1)), you are not exempt from the entire rule. You must still strictly comply with these three sections:



SECTION (D)

Fatigue Mitigation

Implement methods to mitigate controller fatigue, including scheduling limits and education.



SECTION (I)

Compliance Validation

Submit procedures to PHMSA/State regulators upon request and make them available for inspection.



SECTION (J)

Compliance & Deviations

Maintain records demonstrating compliance and document any deviations from procedures.

Operational Implication

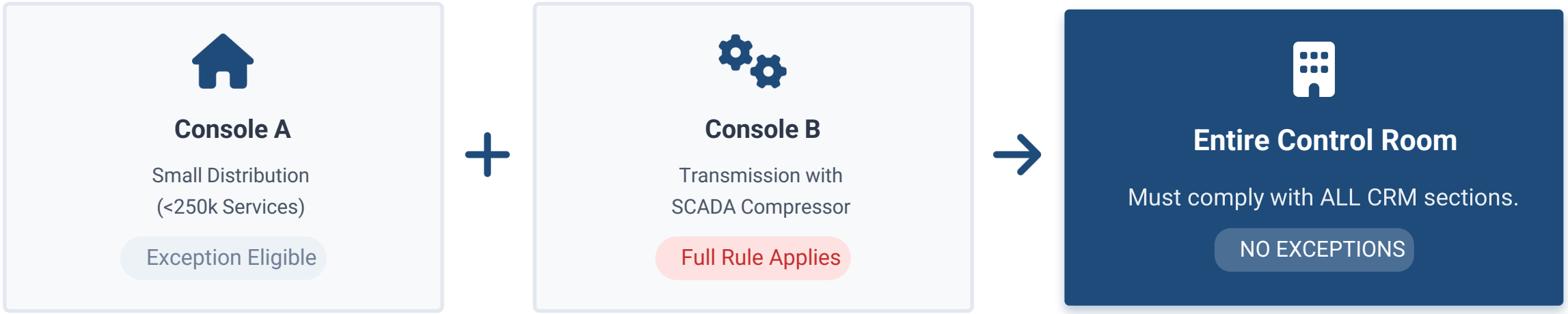
"Limited Scope" does not mean "No Documentation." Operators must still develop written procedures, train controllers on them, and retain records proving these specific requirements are met.

Critical Caveat: Entire Control Room Scope

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⚠ The Room-Level Rule

Exceptions apply to the entire control room, not individual consoles. You cannot have a "mixed compliance" environment within a single room.



If a single console performs non-exempt functions, the exemption is void for the whole room.

Hazardous Liquids: No Exceptions

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Part 195

No Regulatory Exceptions

Unlike gas regulations, 49 CFR §195.446(a) contains no limited-scope provisions. There are no exceptions based on size, service count, or facility type.

Composite Operators (Gas + Liquids)

This is a crucial distinction for operators managing both asset types. If your control room is responsible for any jurisdictional hazardous liquid pipeline operations:

- Gas exceptions are nullified
- Full CRM Rule (192 or 195) applies
- Affects the entire control room

Bottom Line: Liquids in Scope = Full CRM Program Implementation

Top 3 Action Items

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1

Validate Control Room Definition

Don't assume you know every location. Document specific criteria (CR.CRMGEN.CRMCRITERIA.P) to rigorously identify all function-based control rooms and controllers.

2

Verify Gas Exceptions Rigorously

Document service counts and confirm zero SCADA-enabled compressors. Remember: the exception must apply to the entire control room, not just one console.

3

Confirm Full Program Implementation

If you handle liquids or don't meet gas exceptions, full compliance is mandatory. Ensure procedures are formalized, approved, and readily available.

Closing & Next Episode

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Episode 1 Recap

We have defined exactly where the CRM Rule starts and who is responsible. Accurate scope determination is foundational—if the rule applies, full or limited compliance is mandatory based on your specific operations.

Key Takeaways & What's Next

- Determine applicability based on function (SCADA + Control Room), not location
- Hazardous liquids operations trigger full compliance—no exceptions
- Gas exceptions must apply to the entire control room to be valid
- Next Episode: Roles, Authorities, and Awareness

Thank you for listening!