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# **MRO Self-Logging Program Eligibility Determination Process**

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## **1. Document Overview**

A High Reliability Organization (HRO) is an organization that has succeeded in avoiding catastrophes in an environment where normal accidents can be expected due to risk factors and complexity. HROs manage the unexpected through five principles: (1) preoccupation with failures rather than successes, (2) reluctance to simplify interpretation, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise, as exhibited by encouragement of a fluid decision-making system.

Together these five principles produce a collective state of mindfulness. To be mindful is to have a rich awareness of discriminatory detail and enhanced ability to discover and correct errors that could escalate into a crisis. These five principles are the fundamentals that are the basis of improvements in quality, reliability, and productivity in any organization. Through development of this mindfulness, HROs demonstrate the capacity to anticipate and to contain unexpected problems.

In considering whether a registered entity qualifies for participation in the Self-Logging Program, the Regions will evaluate the entity's demonstrated effectiveness at identifying noncompliance, assessing the risk posed by noncompliance, and mitigating noncompliance using the five HRO principles.

## **2. Demonstrating the Capacity to Anticipate Unexpected Problems**

### **2.1 HRO Principle 1: Preoccupation with Failure**

To be preoccupied with failures rather than successes means that HROs encourage reporting of errors, they sweat the small stuff, they use a robust feedback system, and they treat even small mistakes as a symptom that something is wrong with the system. They treat any lapse as a symptom that something may be wrong with the system, something that could have severe consequences if several separate small errors happen to coincide. They also make a continuing effort to articulate mistakes they don't want to make.

Regions will consider and evaluate the following related to the Entity's preoccupation with failure:

1. Has the Entity demonstrated that it has effective processes in place for identifying possible noncompliance with Reliability Standards?
2. How is possible noncompliance communicated across the organization?
3. Are employees rewarded for spotting problems, mistakes or errors? Describe any corporate incentives tied to identification, reporting and/or remediation of compliance and risk concerns.

### **2.2 HRO Principle 2: Reluctance to Simplify Interpretation**

To be reluctant to simplify interpretation means that HROs take deliberate steps to create a complete picture. They encourage diverse experience and differences of opinion without destroying nuances that diverse people detect. HROs understand that a simple answer to a complex problem may indicate a less than full understanding of the problem.

When they "recognize" an event as something they have experienced before and understood, that recognition is a source of concern rather than comfort. The concern is



that superficial similarities between the present and the past mask deeper differences that could prove fatal.

Regions will consider and evaluate the following related to the Entity's reluctance to simplify interpretation:

4. Based upon past performance, how thoroughly does the Entity investigate the facts surrounding an identified possible noncompliance?
5. How accurately has the Entity assessed the risk to reliability posed by noncompliance?
6. Has the Entity demonstrated that it has processes in place to trend-spot possible noncompliance with similar causes?

### **2.3 HRO Principle 3: Sensitivity to Operations**

To be sensitive to operations means that HROs want to know how things work, not just how they are supposed to work. They treat deficiencies in normal operations as "free lessons" that signal the development of unexpected events.

HROs are attentive to the front line where the real work gets done. People who refuse to speak up out of fear undermine the system, which knows less than it needs to work effectively. It makes no difference whether information is withheld for reasons such as fear, ignorance or indifference.

Regions will consider and evaluate the following related to the Entity's sensitivity to operations:

7. Has the Entity effectively identified the cause(s)/root cause(s) of past noncompliance?
8. Describe how Entity's assessment of risk to reliability impacts its response to the noncompliance.
9. Has the Entity provided timely and thorough communications to both the employees responsible for mitigation and to the Region?

## **3. Demonstrating the Capacity to Contain Unexpected Problems:**

### **3.1 HRO Principle 4: Commitment to Resilience**

A commitment to resilience means that HROs develop capabilities to detect, contain and recover from those inevitable errors that are part of an indeterminate world. HROs develop behaviors that allow individuals and their organizations to be resilient. HROs approach unplanned events in terms of mitigation and rapid recovery.

The hallmark of an HRO is not that it is error-free but that errors don't disable it. Resilience is a combination of keeping errors small and of improvising workarounds that allow the system to keep functioning. Both these pathways to resilience demand deep knowledge of the technology, the system, one's coworkers, and most of all, oneself.



Regions will consider and evaluate the following related to the Entity's commitment to resilience:

10. How has the Entity demonstrated that it has effective processes in place for addressing/mitigating identified causes of noncompliance (both cause of discrete noncompliance and prevention of recurrence)?
11. Does the Entity assess the effectiveness of its mitigation activities?
12. Does the Entity continually direct resources to training and retraining employees on the technical systems, as well as on compliance obligations?

### **3.2 HRO Principle 5: Deference to Expertise**

HROs push decision making down to the front line and decisions are made by the people with the most expertise. They understand that decisions made by those with the most expertise are likely to be more timely and correct.

Decisions are made on the front line, and authority migrates to the people with the most expertise, regardless of their rank. The decisions migrate around these organizations in search of a person who has specific knowledge of the event.

13. Has the Entity designated "owners" of noncompliance identification/risk assessment/mitigation? Describe how ownership is defined/monitored/communicated.
14. If something unexpected occurs (noncompliance), are decisions made by the most highly qualified employees, regardless of rank? How is this authority communicated internally and has the Entity demonstrated this deference in the past?