



# RCP Additions: Risk Assessments

Mary McCarthy  
Canal Barge Company, Inc.  
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# Background

- ▶ About Me
  - ▶ Quality Systems Manager for Canal Barge Company
  - ▶ RCP Working Group Member
- ▶ Risk Assessment addition to RCP
  - ▶ Required for Coast Guard approval
  - ▶ High-level impact on safety
  - ▶ One of the more complex additions
  - ▶ Resources on AWO website
- ▶ Agenda
  1. Risk Assessment Addition to RCP
  2. How to Write a Risk Assessment Procedure
  3. Risk Assessment Form
  4. Verifying Compliance During Audits
  5. Resources



## Risk Assessment Addition to RCP

- ▶ “Procedures to systematically assess and manage identified risks to onboard personnel, vessels, and the environment. The procedures shall address:
  - a) Risk discovery
  - b) Risk evaluation
  - c) Risk control measures to establish appropriate safeguards to reduce risk to an appropriate level
  - d) Procedures to identify, assess, and manage the risk of hazards introduced by new or non-routine changes to: equipment, staffing (ashore or afloat), or procedures”
- ▶ Definition: A process that includes identifying hazards and analyzing or evaluating the risk associated with those hazards to determine if existing controls are adequate, or if additional controls to eliminate or reduce the risk to an acceptable level to the organization are needed.



## Risk Assessment Addition to RCP

- Explains when and how Risk Assessments are conducted
- Related to, but not the same as, other risk assessment tools
  - JSAs
  - Toolbox talks, pre-job huddles
  - Last-minute risk assessments
- Key: Determining which risks to assess, and how often to perform risk assessments
- Strongly encourage professional training

# How To Write a Risk Assessment Procedure

1. Start with company-specific procedure template
2. Risk Discovery/Identification
  - Explain how will identify risks to assess
  - Use RCP language as a guide
  - Ex: Incident investigations, audit findings, personnel changes, new regulations, suggestions from crew, etc.
  - When selecting a risk to assess, be specific (ex: describe a scenario)
  - *Example: Around 1100 on a clear summer day at a Mississippi River fleet at MM 228 (Baton Rouge), a shift boat approaches a loaded barge at an angle. A deckhand begins walking down push knee stairs to lower deck. The fleet boat bumps the barge and the deckhand falls from the steps into water on the starboard side, between the boat and the fleeted barges.*

# How To Write a Risk Assessment Procedure

## 3. Primary Risk Evaluation/Assessment

- List existing controls
- Define risk types
  - People
  - Environment
  - Property
- Define risk assessment criteria
  - Likelihood
  - Severity
- Matrix

|                          |                 | Severity of Consequence |             |             |
|--------------------------|-----------------|-------------------------|-------------|-------------|
|                          |                 | Inconsequential         | Moderate    | Severe      |
| Likelihood of Occurrence | Unlikely        | Low Risk                | Medium Risk | Medium Risk |
|                          | Somewhat Likely | Medium Risk             | Medium Risk | High Risk   |
|                          | Very Likely     | Medium Risk             | High Risk   | High Risk   |

- *Example: Existing controls are hand rails, fall overboard prevention training video, life vests, and life preservers. The risk is to a person, injury or death. The Likelihood of Consequence is Somewhat Likely, and the Severity of Consequence is Severe. Therefore, this is a High Risk. Risk is deemed not acceptable. Risk Assessment continues.*
- Evaluate if existing controls are acceptable for managing risk. If so, the Risk Assessment is over. If not, it continues.

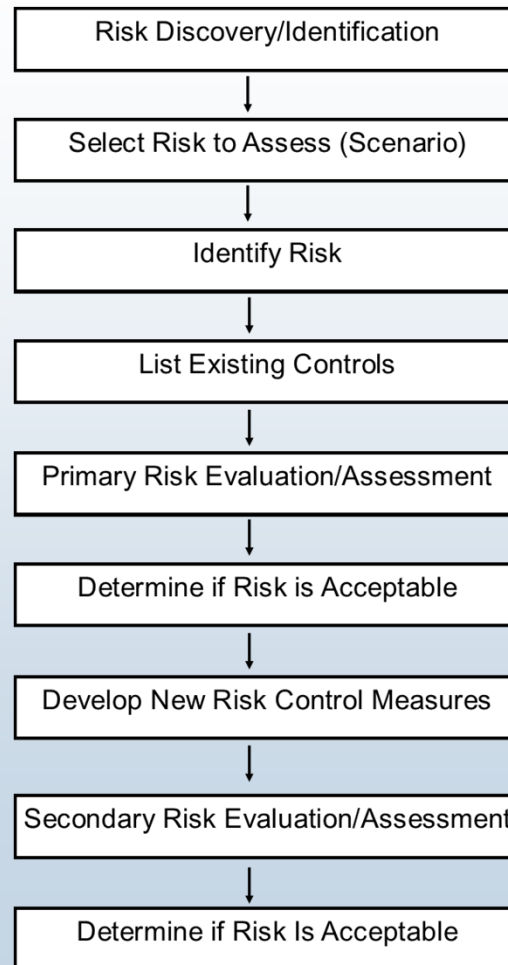
# How To Write a Risk Assessment Procedure

## 4. Secondary Risk Evaluation /Assessment

- List additional controls for mitigating risk
- Explain how documented and implemented
- If controls cannot be implemented to reduce the risk to an acceptable level, action/activity will not be performed
- *Example: Additional controls are a fall overboard training class, management visits to boat, and rope bags. The Likelihood of Consequence is Unlikely. The Consequence is Severe. Therefore, this is now a Medium Risk. Risk is deemed acceptable.*

|                          |                 | Severity of Consequence |             |             |
|--------------------------|-----------------|-------------------------|-------------|-------------|
|                          |                 | Inconsequential         | Moderate    | Severe      |
| Likelihood of Occurrence | Unlikely        | Low Risk                | Medium Risk | Medium Risk |
|                          | Somewhat Likely | Medium Risk             | Medium Risk | High Risk   |
|                          | Very Likely     | Medium Risk             | High Risk   | High Risk   |

# Risk Assessment Flow Chart





# How To Write a Risk Assessment Procedure

5. Other Items to Consider Including in Procedure:
  - ▶ How Risk Assessment team members are selected
  - ▶ Evaluating multiple risks within one scenario
  - ▶ What level of risk is acceptable or unacceptable
    - ▶ Ex: High Risk items are automatically unacceptable
  - ▶ Guidelines on when Risk Assessments should be done
  - ▶ Informing relevant managers about Risk Assessment results, new controls
  - ▶ Requiring manager approval of Risk Assessments
  - ▶ Re-assessing risk after implementing controls
  - ▶ Method for tracking implementation of new controls

# Sample Risk Assessment Form

| RISK ASSESSMENT FORM                   |  |
|--|--|
| <b>Title:</b>                          | <b>Date:</b>   |
| <b>Assessment By:</b>                  | •<br>•<br>•  |
| <b>Risk Scenario Description:</b>      |  |
| <b>Risk:</b>                           | •  |
| <b>Existing Risk Control Measures:</b> | •<br>•<br>•  |
| <b>Primary Risk Assessment:</b>        | •<br>•<br>•  |
| <b>Is Risk Acceptable?</b>             | <input type="checkbox"/> Yes<br><input type="checkbox"/> No<br>If no, develop additional controls.   |
| <b>New Risk Control Measures:</b>      | •<br>•<br>•  |
| <b>Secondary Risk Assessment:</b>      | •<br>•<br>•  |
| <b>Is Risk Acceptable?</b>             | <input type="checkbox"/> Yes<br><input type="checkbox"/> No<br>If controls cannot be implemented to reduce the risk to an acceptable level, the action/activity will not be performed. |

# Verifying Compliance During Audits

| RCP ADDITIONS FOR USG COMPLIANCE WITH SUB-M Using October 2014 RCP references |   |  | TVIB – RCP MANAGEMENT AUDIT WORKSHEET |                        |     |     |
|---|---|--|---------------------------------------|------------------------|-----|-----|
| ? #   | Question  | RCP Expectation  | Regulatory Requirements               | Additional Information | Req | Rec |
| <b>New RCP Section A – Functional Requirements</b>                            |   |  |                                       |                        |     |     |
| 1.1   | Does the company have a written procedure that integrates the concept of risk management? (II-A-1)                        | The company should have a comprehensive written procedure on risk management and assessment. This is different than a Job Safety Analysis, Toolbox Talk, or other risk-related procedure. (While the questions below separate out the different elements of the risk assessment procedure, one procedure can easily satisfy the requirements.) |                                       |                        | X   |     |
| 1.2(a)  | Does the company have written procedures to systematically assess identified risks to <u>onboard personnel</u> ? (II-A-1) | The risk assessment procedure should specifically address how risks to onboard personnel are identified (discovered).  |                                       |                        | X   |     |
| 1.2(b)  | Does the company have written procedures to manage identified risks to onboard personnel? (II-A-1)                        | The risk assessment procedure should specifically address how risks to onboard personnel are managed.  |                                       |                        | X   |     |
| 1.2(c)  | Are there written records available to demonstrate compliance with the procedures in 1.2 (a) and (b)? (II-A-1)            | There should be filled out risk assessment forms and/or other documentation showing that the risk assessment procedure was used to identify (discover), assess, and manage risks to onboard personnel. (Documentation of risk assessments completed may cover multiple categories of risk.)  |                                       |                        | X   |     |
| 1.3(a)  | Does the company have written procedures to systematically assess identified risks to <u>vessels</u> ? (II-A-1)           | The risk assessment procedure should specifically address how risks to vessels are identified (discovered).  |                                       |                        | X   |     |

- TVIB (Towing Vessel Inspection Bureau): <http://www.thetvib.org/>
- By 1/1/2016: Procedure that meet requirements
- Phased-in requirements for proof of implementation (TBD)



# Resources

- ▶ Mary McCarthy  
[mmccarthy@canalbarge.com](mailto:mmccarthy@canalbarge.com)  
504-324-6805
- ▶ Holly Riester  
[hriester@americanwaterways.com](mailto:hriester@americanwaterways.com)  
703-841-9300
- ▶ AWO website – RCP Transition
  - ▶ [www.americanwaterways.com](http://www.americanwaterways.com), prominent link on Homepage
- ▶ AWO Members providing training services
  - ▶ Link on AWO RCP Transition website

# Webinar and Meeting Schedule

## ▶ Future Webinars

- ▶ July 21 at 3:00 p.m. EDT – Revised Internal Auditing Procedures
- ▶ August 4 at 3:00 p.m. EDT – Near-miss Reporting, Lessons Learned, and Corrective Actions
- ▶ August 14 at 3:00 p.m. EDT – Identification of Critical or Essential Equipment/Systems
- ▶ September 10 at 3:00 p.m. EDT – Additional requirements related to organizational authority, document control, and tracking of spills.

## ▶ AWO Safety Committee Meeting

- ▶ August 18-19, Memphis

## ▶ Questions?