

Risk Assessment



A Practical Guide to Assessing Operational Risks
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January 12, 2017

Background On the Book

ASSE, GOSH and RIMS

ASSE Safety 2012 – Denver

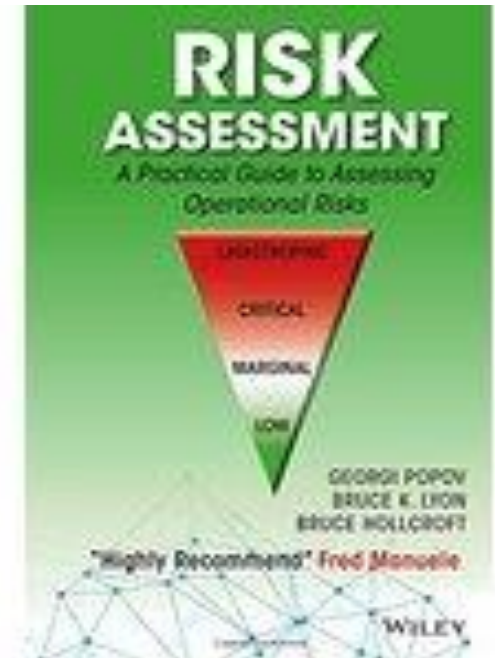
Professional Safety article – December 2012

ASSE Webinar 2013

Proposal to Wiley in 2013

Writing, editing, revising 2014/15

Publishing 2016



Evolution of Risk Assessment

Don't get caught

Play dumb

Comply if you must

Exceed compliance

Identify and correct hazards

Assess and reduce risks

Risk-based decision making



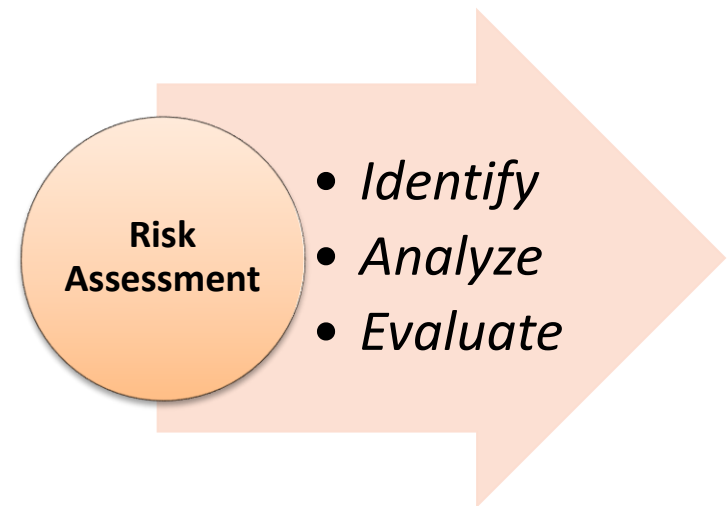
Assessing Risk

Every individual, organization, industry, etc. is continually assessing risk.



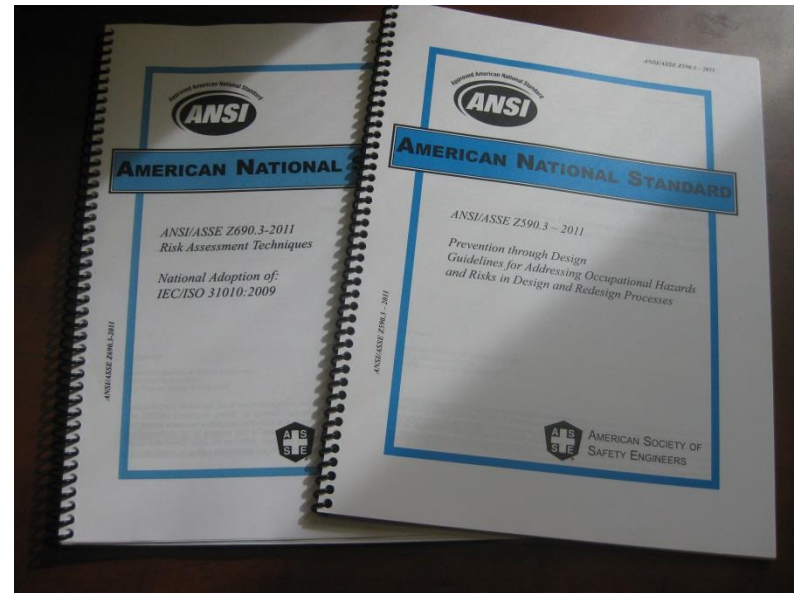
Risk Assessment

Process of risk identification, risk analysis and risk evaluation in terms of potential consequences and likelihood



Standards

- ANSI Z690.1, 690.2, 690.3
- ANSI Z10
- ANSI Z590
- ANSI B11
- MTL-STD 882
- OSHA PPE
- OSHA PSM



Risk Assessment Process

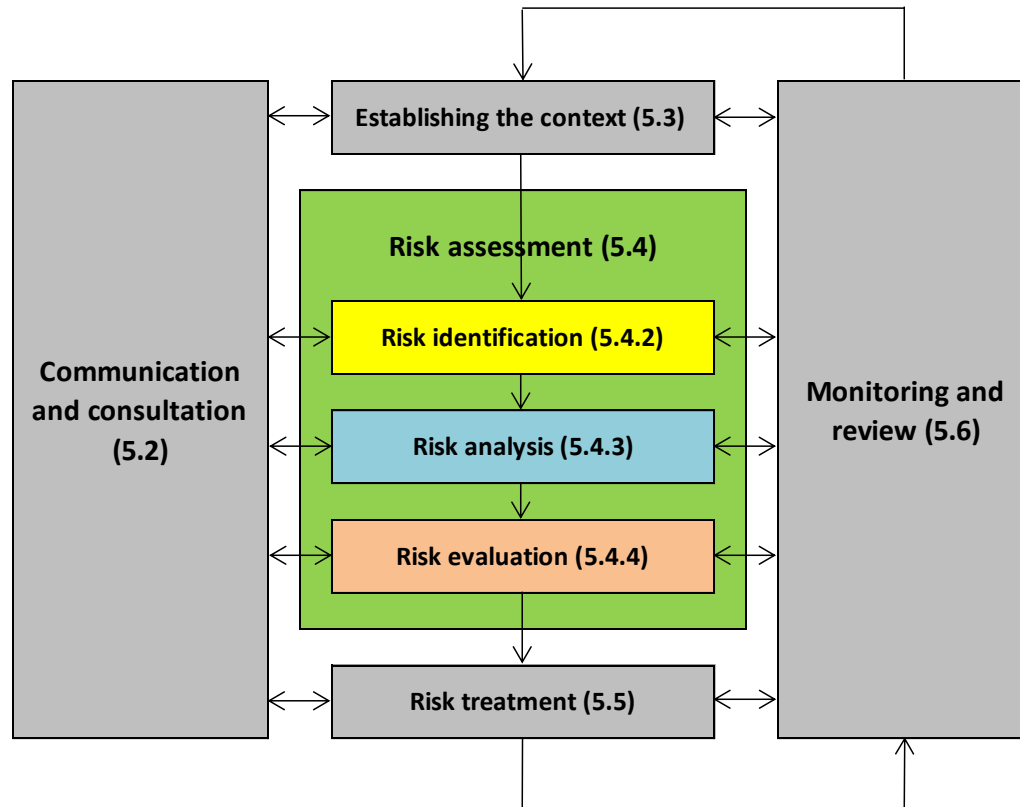


Figure 1 - Risk Management Process - ANSI/ASSE Z690.2-2011, p.21



Risk Assessment Matrix

Risk Assessment Matrix

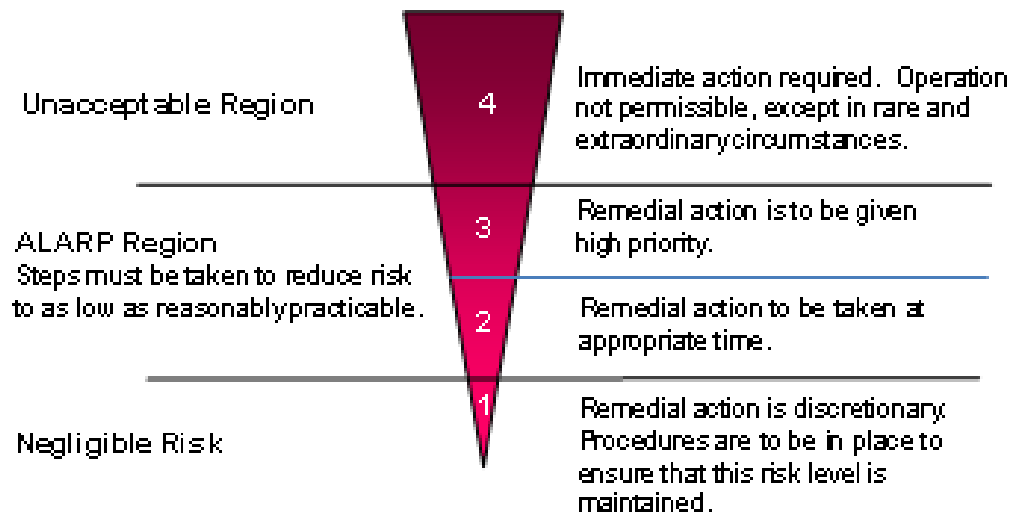
Frequency (Likelihood of Occurrence)	Severity (Consequences of Incident)				
	Incidental < \$10K	Minor \$10-25K	Serious \$25 -100K	Major \$100-500K	Catastrophic \$500K >
Every Year	5	10	15	20	25
1 – 5 Years	4	8	12	16	20
5 – 10 Years	3	6	9	12	15
> 10 Years	2	4	6	8	10
Almost Never	1	2	3	4	5



Risk Assessment

Reducing Uncertainty

The ALARP Principle



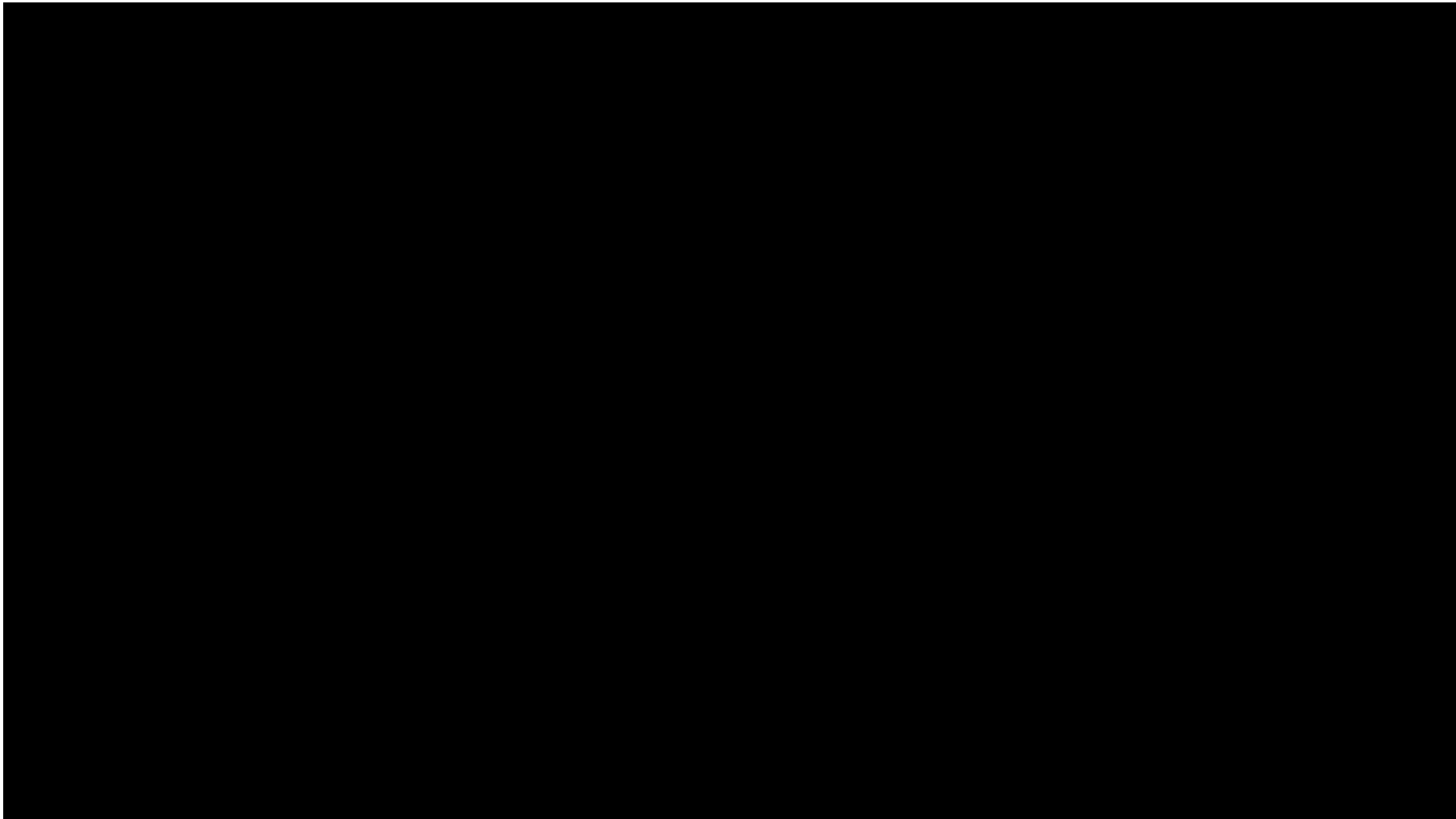
Adopted from ANSI Z390.3; Manuale

Risk Assessment

Risk-Based Decision Making



To Close



Comments or Questions

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