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Atoms for Peace and Development

Document Analysis

Why document analysis?

- Documents communicate management values and expectations
- Reveal approaches/beliefs related to ensuring compliance, e.g. how positional power authority is distributed, degree of formality, approaches to corrective actions, etc.
- May reveal actual work practices, e.g. event reports.
- Can show how the organization thinks, e.g. in documents with analytical content.
- A document says a lot about how the organization presents itself – to itself.

What a document analysis is not

- A quality review of individual documents
- An ‘audit’ of documents against national or international management system requirements
- About saying if documents are good or bad, right or wrong
- Exhaustive

What a document analysis is

- A high level analysis to gain insights
- A way of understanding *what* the organization pays attention to and *how* it pays attention to it
- Understanding how various aspects of the organization are reflected in documents
- Understanding the ”machinery of fact production”

The role of document analysis

- Safety culture cannot be assessed by only analysing documentation
- However the evidence gained can reinforce information gained from other assessment methods
- It can provide insights into actual events, e.g. through event reports

Which documents

and what to look for?

Which documents?

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Internal:

- Safety policy, objectives and business plans
- Performance indicators
- Key management system processes
- Investigation reports
- Licensing documents
- Training records
- Reward and recognition programmes
- Overtime policy and statistics
- Results from previous internal audits and assessments
- Media releases
- Meeting minutes

Which documents?

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External documents:

- IAEA missions, other External reviews, etc.
- Periodic safety reviews
- External operating experience

Remember – look at a sample of documents to gain insights, not an exhaustive review

What can this tell us?

Document analysis

Analyse Results

- Insights gained
- Themes or Issues

Important:

- Clearly identify the source documents to enable follow-up and validation

So what kinds of things can this tell us?

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1) Value and priority given to safety, e.g.:
   - Quality of documentation - up to date, accurate, easy to find and use?
   - Clear, consistent messages?
   - Evidence of long term safety goals, strategies and plans?

So what kinds of things can this tell us?

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2) Safety leadership:

- Clearly documented standards and expectations of performance for managers and personnel?
- Intolerance to deficiencies and situations adverse to safety?
  - e.g. low number of workarounds, problems and deficiencies addressed in timely manner

So what kinds of things can this tell us?

3) Level of involvement and engagement of all personnel

- Are people raising concerns and making suggestions for improvement?
- Evidence of changes made in response to suggestions/concerns?
- Involvement in decision-making and other activities (e.g. procedure development, organisational change)?

So what kinds of things can this tell us?

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4) Clarity of roles, responsibilities and accountabilities

- Clearly defined roles and responsibilities?
- High level of compliance with rules and procedures?
- Clear expectations for use of procedures
- Evidence of improvement of processes and procedures based on feedback from staff?
- Clear individual goals and targets for safety for managers and all personnel?

So what kinds of things can this tell us?

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5) Approach to rewards and recognition

- Is the reward system aligned with desired safety behaviours and outcomes?
- Evidence of people being rewarded for positive safety behaviour? E.g. ownership and accountability, conservative decision making
- Does the reward system address:
  - Nuclear/process as well as industrial/personnel safety?
  - Teamwork as well as individual performance?

So what kinds of things can this tell us?

6) Reporting culture

- Are internal and external assessments conducted frequently and results addressed expeditiously?
- Effectiveness of processes to gather and use experience from a wide variety of sources?

So what kinds of things can this tell us?

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7) How the organization thinks and learns

- Which types of conclusions are drawn in e.g. event reports?
- What types of follow-up actions are deemed important?
- Which kinds of learning points are picked up from events or analysis?
- How does the organization respond to critique from external agents?
- How does the organization respond to critical incidents?
- What kind of pre-emptive/proactive work is undertaken?

Final thoughts

- How do people think in the organization?
- What kinds of information are persuasive?
- What patterns appear across the different documents?
- What solutions are commonly used?
- What kinds of reasoning are used to justify decisions?
- What is the quality or tone of messages between stakeholders, with Licensees?
- What have you learned about how the organization represents itself to itself?

Summary

- Document reviews can provide insight into how the organization thinks and how it intends to behave
- Not a review of the management system
- Important to code and tag information systematically
- Sample many different types of documents over a period of time to see patterns of issues and responses, shifts in thinking
- Can suggest cultural issues that warrant additional exploration

Thank you!