

LEAP Summit Workshop 2

Third party audits and the importance of Clarity in Conditions

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Agenda

Part 1

- Introductions
- Environmental auditing 101
 - Group Activity 1 – Audit Findings

Part 2

- Importance of clarity in conditions
 - Group Activity 2 – Poor Condition Example

Part 3

- Where to from here?
- Final thoughts

About Us



Romin Nejad

- Principal Environmental Engineer / Lead Auditor
- 15 years experience
- 50+ completed audits
- Speciality environment planning / management systems / compliance



Scott Lambert

- Senior Environmental Scientist / Principal Auditor
- 14 years experience
- 30+ completed audits
- Speciality environment planning / management systems / compliance
- Worked in NZ, Australia, USA & Chile

Part 1

Environmental Auditing 101

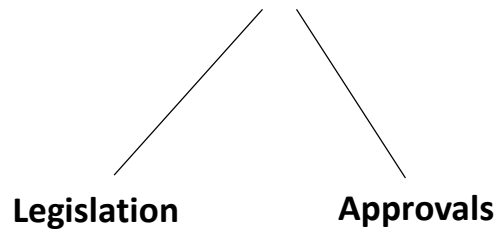
Why Do We Audit?

- Regulator checks
- Company compliance checks
- Validate commitments
- Identify deficiencies
- Due diligence
- Improve operations
- Maintain effective operations
- Maintain reputation
- Maintain certifications
- Investigate incidents

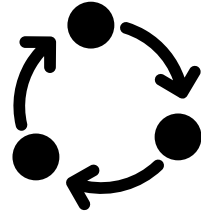
Types of Environmental Audits



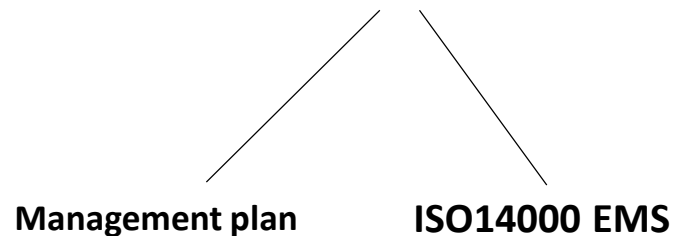
COMPLIANCE AUDITS



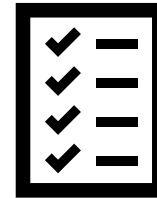
- Internal or third party
- Voluntary or legislated
- Sample or forensic style



SYSTEM AUDITS



- Internal or third party
- Australian standards
- Voluntary, contractual or required by standard



CONTAMINATED LAND AUDITS

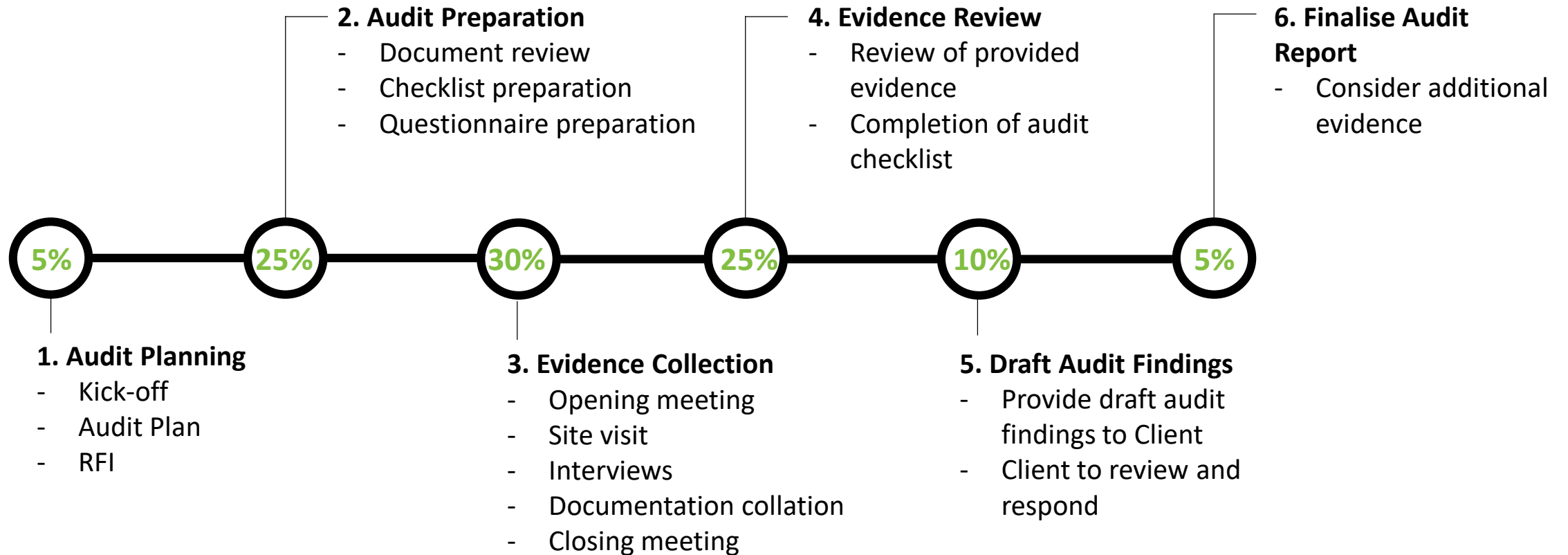
- Third party
- Forensic
- Legislated requirement



OTHER TYPES

1. Due diligence audits
2. Erosion and sediment control audits
3. Sustainability & Energy audits
4. **PRCPs & ERC Audits**
5. Waste audits
6. NGRS and Carbon accounting audits

Audit Process



What Makes A Good 3rd Party Audit Report

- Clear and Concise
- Findings are objectives and reproducible
- Evidence reviewed is clearly outlined
- Includes an action plan, or clear actions to implement
- It is clear how the auditor interpreted conditions
- Findings are formed from objective evidence

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 1:

Condition: Solids must be stored on an impermeable pad within the premises.

Poorly Constructed Wording

During the audit it was observed the biosolids were applied to the land as soil conditioner adjacent to the first flush pond.

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 1:

Condition: *Solids must be stored on an impermeable pad within the premises.*

What is the requirement?

- Definition of Solids: Within the license definitions, solids means: *"Means any solids and sludges extracted from effluent, and any sludges, sediments and surface scums originating from the pondage systems"*
- Based on this definition, the condition requires bio-solids removed from the WWTP must be stored on an impermeable pad.

What evidence was observed?

- Observed solids were being used as soil conditioner.

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 1:

***Condition:** Solids must be stored on an impermeable pad within the premises.*

Well Constructed Finding:

The definition of solids within the EPL states:

"Means any solids and sludges extracted from effluent, and any sludges, sediments and surface scums originating from the pondage systems"

Based on the above definition, bio-solids removed from the WWTP must be stored on an impermeable pad. During the audit it was observed the biosolids were applied to the land as soil conditioner adjacent to the first flush pond. This is not an impermeable surface in accordance with the condition.

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 2:

Condition: *All chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund.*

Poorly Constructed Wording

Some chemical storages did not achieve a bund capacity of 110% of the largest container, including:

- The bunding of Class 8 material outside the hook room was not sufficiently sized to be 110%.
- Unbunded chemical storage was observed within the render plant.

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 2:

Condition: *All chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund.*

What is the requirement?

- The condition requires that all chemicals, fuels and oils are stored in bunded areas, with impervious flooring, that are sized to contain 110% of the largest container.

What evidence was observed?

- Some chemical storages did not achieve the bund capacity

Objective Finding vs Poorly Constructed Finding

Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)

Example 2:

Condition: *All chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund.*

Well Constructed Finding:

The condition requires that all chemicals, fuels and oils are stored in bunded areas, with impervious flooring, that are sized to contain 110% of the largest container. During the audit some chemical storages did not achieve a bund capacity of 110% of the largest container, including:

- The bunding of Class 8 material outside the hook room was not sufficiently sized to be 110%.
- Unbunded chemical storage was observed within the render plant.

Activity 1: Reword Findings

Each group will be given an example of a condition and evidence observed.

The purpose of the activity is for each group to word a well constructed finding.

Activity 1: Reword Findings – Group 1

Context: The site is a power station located in Central Queensland. Fly ash is temporarily stockpiled in a disposal area. There site is a no-release water site, with capacity to contain 1 in 100 year storm event.

Condition: All reasonable and practicable measures must be implemented and maintained to minimise erosion and the release of sediment.

Evidence Provided:

1. ESCP was observed for the site.
2. Some major scouring was observed on the fly ash stockpile. The Client advised this overburden was only temporarily stored there until it could be moved to a permanent location with drainage controls.
3. No off-site movement of sediment was observed.
4. Monitoring records indicated there had been no increase in turbidity or TSS.
5. ESCP inspection records were observed and completed. The major scouring on the stockpile was identified over 6 weeks of inspections.

Activity 1: Reword Findings – Group 2

Context: The site is a meat processing plant with a rendering plant used for off-cuts and offal. Nearby residents are located approximately 750 m from the site boundary. The primary odour source is the rendering plant on-site.

Condition: The licensee must not cause an odour nuisance beyond the boundary of the site.

Evidence Provided:

1. Methane monitoring records provided.
2. The emissions from the rendering plant are directed to a biofilter.
3. Maintenance records for the biofilter.
4. Complaints handling procedure provided and shows the process to receive and investigate odour complaints.
5. During the site inspection no discernible odour was noted around the site.
6. Complaints register with 1 odour complaint
7. Investigation determined odour was from the subject site.

Activity 1: Reword Findings – Group 3

Context: The site is a mine with an on-site laboratory which undertakes the calibration of water quality monitoring equipment on the site. Monitoring required on-site included surface water and ground water.

Condition: All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.

Evidence Provided:

1. A supply of sample bottles and eskies.
2. Completed calibration records for the surface water monitoring equipment.
3. Relevant training records for the sampling and monitoring technicians.
4. Observed the monitoring equipment.
5. Standards required for calibration were available and in date.
6. Laboratory monitoring analysis reports.

Part 2

Importance in Clarity of Conditions

Poor Conditions vs Good Conditions

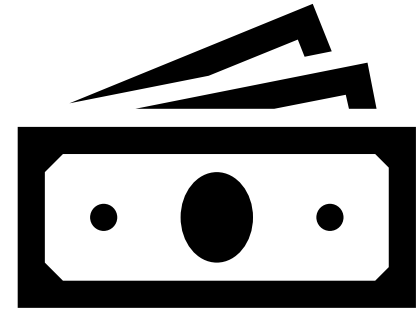
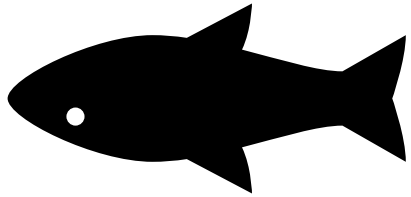
What makes a good condition?

- Measurable
- Objective / not ambiguous
- Relevant to operations/activities
- Reasonable

How do we get poor conditions?

- Poorly written applications
- Overly prescriptive conditions
- Standardised conditions not fit for purpose
- Amalgamation of approvals
- Changing operations and not updating approvals
- Out dated conditions still being applied

What are the consequences of poor conditions?



Case 1: Financial Cost



Site: Electricity Industry

Condition Requirement: Dust deposition monitoring at 10 locations.

Original Reason for Condition: Neighbouring properties were located adjacent to the site at the time of approval.

Current Situation: 5 years ago neighbouring properties were purchased by the proponent to minimise impact on sensitive receptors. Dust deposition monitoring had not ceased.

Estimated cost: \$90,000

Case 2: Compliance



Site: Greenfield Mine

Condition Requirement: Quarterly groundwater monitoring following issue approval.

Situation: Proponent had not commenced operations and was not intending to commence for a number of years.

Outcome: Penalty infringement notice issued for non-compliance with EA.

Case 3: Potential Environmental Harm



Site: Municipal Wastewater Treatment Plant

Condition: Included release limits for BOD, pH, EC, Faecal Coliforms only. Did not include release limits or monitoring requirements for nutrients.

Outcome: Proponent was releasing treated effluent to land and surface water for a number of years without ensuring acceptable nutrient levels are being achieved.

Example 1 – Good Conditions

Condition: Prior to the commencement of the action, the person taking the action must prepare and submit for the Administering Authorities approval an environmental management plan to address the potential impacts of the action on the Moreton Bay Ramsar Wetland area and listed endangered species.

- Objective/not ambiguous
- Relevant
- Reasonable
- Measurable



Example 2 – Good Conditions

Condition: Mine affected water release events

Prior to the commencement of the wet season (1 November) the holder must ensure a stream flow gauging station/s is installed, operated and maintained to determine and record stream flows at the locations and flow recording frequency specified in Table F4.

- Objective/not ambiguous
- Relevant
- Reasonable
- Measurable



Example 3 – Poor Conditions

Condition: The holder of this EA must monitor for peak particle velocity and air blast overpressure as set out in Schedule G - Table 2 (Blasting Overpressure and Vibration Limits) at the monitoring locations specified in Schedule G - Table 3 (Blasting Overpressure and Vibration Monitoring Locations) and Schedule K – Figure 15 (Blasting Monitoring Locations) for every blast on site.

- Objective/not ambiguous
- Relevant
- Reasonable
- Measurable



Example 3 – Poor Condition

The holder of this EA must monitor for peak particle velocity and air blast overpressure as set out in Schedule G - Table 2 (Blasting Overpressure and Vibration Limits) at the monitoring locations specified in Schedule G - Table 3 (Blasting Overpressure and Vibration Monitoring Locations) and Schedule K – Figure 15 (Blasting Monitoring Locations) for every blast on site.

How can we make this poor condition a good condition:

Split the condition so each type of blasting activity and associated monitoring activity can be measured separately.

- a) The holder of this EA must monitor for peak particle velocity as set out in Schedule G – Table 2a (vibration limits) at the monitoring locations specified in Schedule G – Table 3a (vibration monitoring locations) and Schedule K – Figure 15a (Blasting Monitoring Locations) for every underground blast carried out on site.
- b) The holder of this EA must monitor for peak particle velocity and air blast overpressure as set out in Schedule G - Table 2b (Blasting Overpressure Limits and Vibration Limits) at the monitoring locations specified in Schedule G – Table 3b (Blasting Overpressure and Vibration Monitoring Locations) and Schedule K – Figure 15b (Blasting Monitoring Locations) for every blast carried out for open cut operations on site.

Activity 2: Poor Conditions

Group 1: General and Regulated Waste. Waste oil and used wet cell batteries may be temporarily stored in drums or other containers provided that the drums or containers are:(a) stored in an area designated for this purpose;(b) banded to contain spillages and leakages;(c) securely sealed to prevent spillage.

Group 2: Land developed for the purposes of the extraction of rock or other materials administered by the Proponent must be rehabilitated to a standard acceptable to the administering authority on cessation of the activity.

Group 3: An estimate of the daily quantity of contaminants released from each release point must be based on available measured data recorded at the release points in Schedule H - Table 1 (Contaminant Release Points).

Part 3

Final Thoughts

How to avoid poor conditions going forward?

During the Application Process

- Applications to include suggested conditioning
- Review & test draft conditions
- Use the power of definitions
 - Often neglected in the review of approval conditions
 - The definitions will provide clarity to you and the regulator
 - Can be easier to negotiate definitions than the conditions
- Engage regulator and seek written clarification

Following Approval

- Request auditor provide clarification of conditions
- Identify any outdated conditions during operations
- Define your interpretation of the condition in a compliance register or management plan
- Seek legal interpretation

If required, submit an amendment application (i.e. minor EA amendment).

Summary

- When engaging a third party auditor understand the purpose and what you need from the audit report
- Third party audits should dedicate 25% to preparation
- Ensure audit reports include objective findings and include an action plan
- Requirement compared against Evidence Observed = Finding (i.e. Compliant or Non-Compliant)
- Understand what makes a good condition?
- What are the consequences of poor conditions?
- How can we fix poor conditions?

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