‘If compliance is black or white - why do I continue to see shades of grey?’

Presented at the EIANZ 2011 Conference, September 2011
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Key Words

Compliance, Degrees, Environment, Licence, Conditions, Approval, ComplySure, Risk, Assessment, Software.

Abstract

Regulators see compliance as absolute; you either comply or you don’t. But is there scope for ‘degrees of compliance’ to be reported?

Regulators are placing more emphasis on strict compliance and are threatening swift enforcement where absolute compliance against environmental Licenses, permits and approval conditions are not achieved and reported[1].

Many auditors and compliance assurance practitioners support the opinion that a determination on ‘strict compliance’ is often not straightforward. There are many occasions where specialist interpretation is warranted in order to report definitively whether an event represents a significant non compliance that warrants immediate attention and notification. Furthermore, unrealistic timeframes and poorly worded conditions of consent can unintentionally create a situation where qualification on the level of compliance is necessary.

Innovative tools, such as the ComplySure™ software program, have recently been launched to better facilitate the compliance management and communication process. ComplySure™ couples in-field hazard identification and data capture, with risk assessment methodology and real-time ‘over the cloud’ communication abilities, to provide the compliance manager with ‘anywhere’ control over compliance information; including reporting of significant non-compliance events.

INTRODUCTION

Having been involved in environmental and planning compliance assessments for many years we were challenged early in 2011 when a State Planning Authority specified in an Audit scope:

“(The Audit Report is to) avoid terms such as ‘partial compliance’. An audit is to make findings of either ‘compliance’, ‘non-compliance’ or ‘inability to be determined’”.

On the face of it, such a statement appears perfectly reasonable. Surely operations either comply with a specification or they don’t: it’s a black or white response.

The option to select ‘inability to be determined’ may initially appear attractive to the auditor to break any vagrancy or deadlock in decision making. But is this term really suitable? If information is at hand to enable decisions to be made, auditors must make decisions in order to foster continuous improvement. We auditors rarely find ourselves in a position of having

[1] EPA Victoria press release communication CEO.

perfect information. Audits are a snap-shot in time, using appropriate sample sizes to formulate a qualified opinion. In the presence of imperfect information, the original black or white compliance determination can, at times, blur to a shade of grey.

To further illustrate how 'shades of grey' complicate an environmental practitioner's decision making, we are aware of a recent project that required dust monitoring to be undertaken immediately following the installation of a new process, to confirm compliance with specific air quality policy parameters. However, the installation occurred just prior to the winter months, meaning that whilst the subsequent dust monitoring occurred in accordance with the requirements of the agreed Environmental Management Plan (EMP), the season of the year (i.e. wet winter months) did not necessarily provide representative conditions in which to determine 'absolute' compliance with specific air quality policy parameters. Therefore, whilst compliance with the EMP was achieved, and results obtained confirmed compliance immediately following the installation (i.e. during winter months), the environmental practitioner cannot definitively state that the facility will be operating in full compliance at all time due to the vagrancies of the condition wording.

The following questions therefore arise:

- Is there room for a non-compliance event to be judged a 'low risk' or of 'insignificant excursion' due to:
    - the degree of risk,
    - the situation,
    - marginal, if any, environmental impact; or
    - social consequences?

- Is it reasonable for an finding to be deemed as 'qualified':
    - based on information/monitoring etc to date;
    - subject to ongoing monitoring confirming levels continue to be met;
    - because an action was achieved but not with the specified timeframe; or
    - subject to the implementation of some additional recommendations,

  thereby recognizing that action is being progressed but is yet to be completed.

- Could risk assessment methodology be used to substantiate the 'context' or 'likely consequences' of an event thereby enabling a rating or 'degree' of non-compliance to be allocated?

- Could a system be designed whereby compliance information is captured centrally, updated instantly and accessible from anywhere to facilitate standardized risk assessment and reporting by specialist personnel; thereby achieving both Regulatory reporting requirements and the internal disclosure policy of the organization being audited?

Three (3) Degrees of Compliance

Management systems auditors have, for many years, included degrees of conformance within their reports, namely: Conforms; Major Non-conformance; or Minor non-conformance. We would argue the same 'three (3) degrees' holds true equally for compliance situations.

The degree of compliance may be represented in the following two examples to illustrate the point: one non-environmental situation and the other related specifically to the environmental compartment:

- Example 1:
  The law on jay walking in any Australian city is clear. Do not cross the road except where lights are apparent, and the walking light is green (and that clicking noise is audible). Failure to do so can place you and others at risk. An 'illegal' crossing will rightfully result in the perpetrator receiving a fine.

  The reason for the law is simple: it enables heavy metal motor vehicles and fragile skin, blood and bone humans to co-exist in safety. Judging compliance is also relatively simple. However, is there a situation where crossing a main road away from the pedestrian lights, can possibly represent a tolerable risk. Perhaps at 6am on a Sunday morning at the height of summer for instance. Visibility at that time is good, traffic is minimal (the roads are often deserted), the time may be better spent e.g. in church, helping out both spiritually and emotionally.

  Is this non-compliance event worthy of the same status as a 'casual dash during a wet and dark winter's night amongst heavy traffic'?"

- Example 2:
  A review of environmental emissions data relating to a wood fired boiler discharge revealed excursions above the '*maximum % limit not to be exceeded'*. The excursions occurred randomly for less than 10 events (3 minute averages) in a 3 month period representing less than half an hour total in the 2200 odd hours available (i.e. <0.01%). Exceedences were marginally over the limit and had resulted in no complaint or community concern.

  A strict interpretation of the Licence wording means the company is, at times, in non-compliance. Interpretation and justification would be necessary to argue against a determination of non- compliance.

A similar situation has been experienced for other environmental compartments such as: the pH of water flowing off-site; infrequent activity day period noise, transient low intensity odour, and others.

It appears therefore, the need for degrees of compliance is clear. How then are compliance 'degrees' calculated, and by whom? The answer, we believe, is to obtain a qualified opinion from a specialist following the application of a rigorous risk assessment methodology.

Sounds simple in theory, but this has proven to be difficult in practice, as often there is only one qualified specialist, usually the Environmental Manager, with the experience necessary to undertake the compliance risk assessment and authority to report it.

It is apparent there exists a need for a standardized assessment process that is remotely accessible, and provides the detail necessary to derive risk based compliance decisions.

An Innovative Method to Assess Compliance based on risk assessment

Recent technology changes have enabled compliance systems to become both 'portable' and 'de-centralized'. The advent of smart phones and, more recently, portable tablet processors (iPad and Androids) provide the ability to work wherever there is phone (and therefore also internet data) reception. Furthermore, 'cloud' file management now means we are no longer constrained to the office computer server for data access, management or communications.

These innovations represent fertile ground for better compliance management tools. A recent entrant to this space is the ComplySure™ compliance management system.

ComplySure™ has been purpose designed, from the ground up, by environmental compliance practitioners specifically for Safety Health and Environmental professionals.

The design philosophy is on the four (4) cornerstone principles of:

- Improved process efficiency: *by avoiding double handling.*

  Compliance information is handled once, on the pre-set tablet touch screen, on the spot - thus avoiding the typical four (4) staged process of:

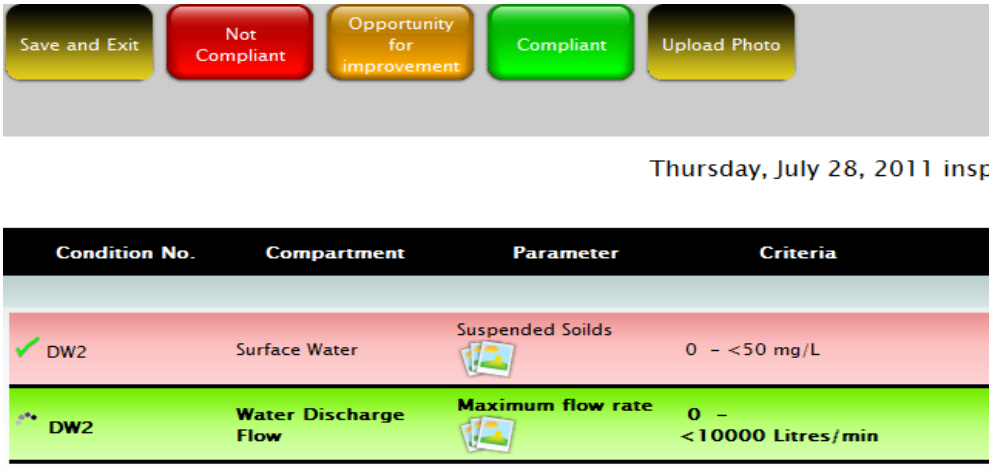

Figure 1: Touch Screen Compliance Assessment Process

  i) completing a checklist during a site inspection;
  ii) returning to the office to transfer data to computer;
  iii) completion of action sheets against observations; and
  iv) issue notifications, reports and then file.

- Sustainable principles: *make use of technology changes to minimise energy needs and get rid of all the paperwork surrounding compliance assessments.*

  Recently introduced tablets operate on only a few Watts of power; usually much lower than comparable desk top and laptop computers. The 'cloud' operating system provides an economy of scale over many small localized servers. The principle of the tablet is to maximize electronic functionality, which avoids paper based checklists and multi-print out of reports.

- Simple to use: *touch screen inputs assist the user capture and access data; compliance performance can be reviewed across multiple sites.*

  Information can be viewed both on an individual site or multi-site comparative basis.

  Records are filed and retrievable at anytime from anywhere with mobile reception (or WiFi) including:
  - Historic records and reports;
  - Site performance and monitoring status;
  - Action plans and agendas;

- Organisation performance statistics; and
- Licence and Permit details.

EPA Licence - [redacted]			
Condition	DW1	Only clean stormwater permitted to discharge off site.	Stormwater discharged from th
- Expectation	Water should be reasonably clear with low sediment and no oil sheen.		
Condition	G2	Reporting of Pollution	EPA must be notified immediatel

Figure 2: Retrieve Licence Detail.

- A focus on the needs of the EHS Compliance Manager: *auto reminders take the worry out of missing a renewal date.*

Risk assessment tools are provided to facilitate compliance reporting consistency.

[redacted] Corporate Manager — ComplySure™ Compliance Management System

Homepage Log out

[redacted] Quarry

Planning & Environment Compliance Monitoring Schedule

Compliance Items for current month: 11
Action Frequency rate: 72.73%(8)
Compliance rate: 75.00%(6)

Licences due for renewal this month: EPA Licence - [redacted] 21-Jul-2011; DSE Net Gain Native Vegetation 21-Jul-2011

Condition number	Required action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EPA Licence - DW903													
DW1	Only clean stormwater permitted to discharge off site.	Due	Due	Due	Due	Due	Due			N/A	Due	Due	Due
G2	Reporting of Pollution	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due
G4	Retention of monitoring records for 7 years	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Due
G3	Annual Performance report by 30 Sept	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Due	N/A	N/A	N/A	N/A
DW2	Discharge to meet Limits	X	Due	Due	Due	Due	Due	X	X	Due	Due	Due	Due
DPI Work Authority #174													
WA-1	Extraction boundary to be clearly marked by white pegs	Due	N/A	N/A	Due	N/A	N/A		N/A	N/A	Due	N/A	N/A
WA-2	Trucks are not to track mud and are to be tarped	N/A	N/A	Due	N/A	N/A	N/A	N/A	N/A	Due	N/A	N/A	N/A
WA-3	Maintenance of a sign at the entrance with company details	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due
WA-4	Topsoil stockpiles to be less than 2m high	Due	N/A	N/A	N/A	N/A	Due	N/A	N/A	N/A	N/A	N/A	N/A
WA-5	General Housekeeping	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due	Due
Wurundjeri Cultural Consent AAV 7921													
AAV 1	Cultural Heritage artifact check	Due	N/A	N/A	N/A	N/A	Due	N/A	N/A	N/A	N/A	N/A	N/A
Cardinia Shire Council Planning Permit T050156 (including EMP requirements 38,29,40,42 & 43)													
EMP2	Dust Fall Out Monitoring	Due	Due	Due	Due	Due	Due			Due	Due	Due	Due
EMP 1	Air Monitoring PM10	Due	Due	Due	Due	Due	Due		Due	Due	Due	Due	Due

Figure 3: Compliance Action Items Calendar – click based menu with auto populate.

The ComplySure™ compliance management system enables the compliance manager to:

- input compliance data information at the source and in the field;
- consistently and accurately evaluate compliance using a risk assessment approach;
- derive a degree and significance of compliance for each event: i.e. compliant; compliant but scope for improvement; minor non-compliance; major non-compliance;
- process and organize data ready for reporting; and
- remotely communicate, over a web based platform, compliance outcomes both within the organization, and externally if required.

Important events, such as a Licence renewal date, are tracked with reminder notifications automatically issued. If the Site Officer is away, ComplySure can escalate notification through management tiers; thereby ensuring you minimise the risk of ever being fined for late renewal.

Reports are prepared automatically from the data set as forms, tables documents or graphs, depending on the requirement of the Manager and intended audience.

The flexibility of ComplySure allows the environmental professional to rate actions in terms of 'compliant', 'opportunity for improvement', and 'non-compliant'.

In the case of an identified non-compliance, the environmental professional can undertake a risk assessment to determine whether the event should be registered as either a 'major non-compliance' or a 'minor-non compliance'.

The risk assessment tools within ComplySure include semi-qualitative approaches aligned with techniques specified in Australian Standard AS/NZS ISO31000: 2009 Risk Management (IEC/ISO 31010: 2009 Risk assessment techniques). This includes an evaluation of the severity of the event, significance of the event, the situation, social consequence, likelihood of recurrence and processes. A risk matrix is also provided to enable the issue to be evaluated in terms of monetary liability and allocated a 'score'.

	Major Non Compliance	Minor Non Compliance
Severity of Event	The event has a quantifiable impact	There are no impacts able to be observed or measured
Significance of Event	The event is a clear excursion	The event is a marginal excursion
Situation	Broadcasted to many	Contained and discrete
Social Consequences	Outrage is possible	Would not be expected to cause concern
Likelihood of recurrence	Recurrence is considered probable	Recurrence is unlikely
Significance of Event	The event is in clear breach of standards or expectations	The event is a marginal excursion
Process:	If any category rates within the Major column, the issue should be considered a Major Non Compliance unless full justification can provided by the assessor.	

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Figure 4: Imbedded risk assessment table to determine a Minor Non-Compliance

Attachment 1: Potential Consequences				Probability				
	Keyword	Environmental Impairment	Damage*	Frequent	Probable	Occasional	Remote	V Unlikely
				5 Several times/ year	4 Once per year	3 Once per 10 years	2 Once every 50 years	1 Once every 100 years
HAZARD SEVERITY	Minor	1 Minor incident contained on-site or low impact to the immediate area off-site	< $5,000	6 (Intermediate) B	5 (Intermediate) B	4 (Standard) C	3 (Standard) C	2 (Standard) C
	Significant	2 Moderate scale incident predominantly extending beyond site	$5,000 to < $25,000	7 (High/ Intermed) A/B	6 (Intermediate) B	5 (Intermediate) B	4 (Standard) C	3 (Standard) C
	Serious	3 Large scale incident	$25,000 to < $250,000	8 (High) A	7 (High) A	6 (Intermediate) B	5 (Intermediate) B	4 (Standard) C
	Severe	4 Major incident	$250,000 to < $2.5 mil	9 (High) A	8 (High) A	7 (High) A	6 (Intermediate) B	5 (Intermediate) B
	Catastrophic	5 Extreme environmental damage	≥ $2.5 million	10 (High) A	9 (High) A	8 (High) A	7 (High/ Intermed) A/B	6 (Intermediate) B

Key - Result Interpretation

* **Damage:** An estimate of the likely financial impact (e.g. fines, remediation, legal, consumer backlash etc) should the event occur.

Rank	Priority	Description
(7), 8, 9, 10	A - High	**Enhanced engineering/ procedural/ systems controls are required to mitigate risk.** Issue potentially breaches legislation and/or represents a high risk of resulting in significant liability OR Prosecution is likely.
5, 6, (7)	B - Intermediate	**Improvements to the engineering/ procedural/ systems controls should be considered to further minimise risk.** Issue could cause environmental impairment OR Prosecution is possible.
2, 3, 4	C - Standard	**Maintain current systems/ controls and regularly audit their effectiveness.** A good level of Risk Control is available.

Note: Risk levels in brackets could fit within either category depending on the situation.

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Figure 5: Risk assessment matrix

Conclusion

The past five (5) years have seen a significant increase in the need to assess compliance against all conditions of consent. On some sites the number of approvals can represent an onerous task to track and report against. For instance, a single site in Victoria can have the following consents: State Planning Approval, Local Council Permits, State Environment Licence (EPA), State Mining Authority(DPI), Cultural Heritage Conditions, Trade Waste Agreement, Catchment Management conditions, and Groundwater extraction licence. Add in multi-sites across other Australian States and the compliance assessment and reporting burden is substantial.

Reporting on a level of compliance appears at times necessary. Such a process aims to sort the significant environmental impairment events from those that are more of an administrative nature. This can reasonably be achieved using a rigorous risk assessment methodology.

To assist EHS managers better manage compliance requirements, ComplySure™, a purpose designed compliance assessment software, has been developed and is now available for use.

Compliance information is directly entered into a 'cloud' based database (i.e. using a 3G or WiFi connection; ideally via a portable tablet). This information can then be accessed over the internet at anytime by SHE Officers, Site Managers, State/ Regional Managers and Corporate Managers to assess, evaluate or communicate compliance.

Reports are standardized and detailed statistical interpretation is available within seconds of assessments being finalised.

Risk management trials confirm that the evaluation and reporting processes are being undertaken in less than half the time of a standard paper based check box process.

The ComplySure compliance system is likely to a valuable tool in the EHS compliance manager's armory; particularly where compliance/ non-compliance scenarios are not a black or white decision.

References

1. *AS/NZS ISO 31000:2009 Risk Management: Principles and Guidelines*
2. *IEC/ISO 31010:2009 Risk Management – Risk Assessment Techniques*
3. *Victorian EPA Compliance and Enforcement Policy Publication 1388, June 2011*
4. *Queensland Department of Environment and Resource Management Enforcement Guidelines 2010*

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