

HSNO COMPLIANCE JOURNEY

By Martin Carlyle CEO



Where we started from ...

Damar Facility 1970



Our compliance journey - How it came about....

As part of good governance practice:

- In January 2011, we employed consultants to do a “Health Check” on our company and look at Compliance Standards
- Huge surprise that we were not compliant in some areas
- Always had full Site Certification
 - ❖ Dangerous Goods
 - ❖ Building Warrant of Fitness
 - ❖ Electrical
 - ❖ Local Authorities

Why upgrade was undertaken

- A business health check
- Commitment to our customers
- Commitment to our staff
- Commitment to the environment
- Future proofing
- Setting an example to the industry

Catalyst from a moral perspective

- Pike River
- Tamahere Cool store

First Step:

Understanding the law

- We must fully understand what the standards are ourselves
- We used three reputable and highly regarded consultants to provide reports on the company's regulatory compliance under the HSNO Act and other legislation
- Consultants do not have in-house knowledge of how legislation and compliance is applied to our business
- So - Must challenge what is provided
- Modify outcomes to fit your facility and environment
- The result of this assessment identified for us approx. 800 issues that would need addressing for the company to be able to achieve the goal of compliance under the legislation and become a world class facility

The Stake Holders

Before we started we took an open and honest Collaborative approach by consultation between:

- Environmental Protection Authority (EPA) now Worksafe NZ
- Worksafe NZ
- Financiers our bank
- Insurance company
- Fire Engineers – Bob Nelilligan and NZ Fire Services
- Local Authority – Rotorua council
- Regional Authority - BOP
- Test Certifier - QEC
- Consultants - AECOM (URS)
- Business Owner, Management Team, All Staff
- Customers & Suppliers

Process

- Get Total commitment from all parties
- Interactive discussions with Consultants
- Full disclosure – do not hide anything but look for the practical solutions
- Open and frank discussions on all findings with all stakeholders
- **THEN TAKE THE CHALLENGE!**

Assessment Method

- We have a large complex site so the site was divided into project areas to enable ease of assessment and identification
- Each area was assessed according to HSNO Triggers and other legislative requirements from the known inventory
- New Hazardous zone drawings were corrected for findings
- Reports were compiled detailing non-compliances and recommendations and strategies to Eliminate, Isolate or Minimise these non-compliances
- Each recommended action in the report was accompanied by the relevant pertinent legislative reference

Areas for Assessment

- Building Design
- Inventory - HSNO Classification
- Segregation of hazardous substances
- Secondary containment
- Controlled Zones
- Hazardous Atmosphere Zones
- Electrical Certification, Electrical registers
- Earthing & Bonding
- Emergency Response Plans
- Personnel Qualifications
- Site Plans and Drawings
- Signage
- Fire and Emergency Equipment

Review of Assessment

- When scoping the assessment tasks, it was quickly realised that this was a mammoth task
- Certain areas of the plant would not meet compliance without an Application to reduce separation distance and other matters for a manufacturing facility of DG products
- Plant and equipment, such as process vessels would also require EPA approved compliance plans

Section 33 Variation

- Legislation gives us the right to submit a variation via Section 33
- Legal framework to alternative solutions to the non compliances
- Total site compliance
 - ❖ HSNO
 - ❖ Health & Safety & Employment
 - ❖ Electrical

No surprises policy procedures

- Transparent monitoring
- Continued assistance and acceptance throughout the company of the Compliance Plan
- Unforeseen circumstances reported on with updated time line

The Project had 3 goals:

- Life safety of staff during the upgrade
- Not to let down any customers with supply
- Stick to the approved EPA/Worksafe programme

Detailed planning

- Every non-compliance issue was transferred to a working risk assessment spreadsheet that was populated
- Each line action was considered and debated for a short term solution, mitigation or final solution, prioritised by risk
- Timelines and sequence of actions to be completed proved to be crucial to the discussions.
- Approximately 18 months was required for the review
- Before the application was lodged an invitation to key EPA officials was arranged for a site visit for reference

Detailed planning

- A project team was set up to plan and administer the various projects we called (PIP).
- Financial control was vested in CEO with approvals for each step by the board.
- Detailed plans and scope of works for construction drawn up for quotations with selected contractors
- New Permit to Work and Contractor Management plan rolled out site wide prior to start
- Each task or project usually impinges on another
- Implementation Plan - details of progress and completions are recorded on the spreadsheet and completions file, maintained to ensure project traceability

Implementation of plan

- Carefully manage and monitor to obtain a focussed result
 - ❖ Timing
 - ❖ Funding
 - ❖ Deliver an engineered solution for your application
 - ❖ Robust auditable sign off of tasks
- Weekly progress reviews are conducted with contractors, staff, engineering consultants and regular visits from the Test Certifier (QEC) and the Fire Engineer
- New technical dossier library including plans and drawings, P & ID's, equipment certification and legislation publications created for site reference.
- Process and procedure documents for training are completed in house as soon as new plant or areas come on line.
- It is **critical** to keep your own design and commissioning information for the life of the installation (we had some learnings here)

Challenges

- Cash flow – bank funding and we sold a business to help pay
- Maintaining production and revenue streams during construction phase
- Changes to planning methods and procedures to achieve customer requirements
- Interrupted flow of raw materials for production
- Introduction of 4 day weeks, night shift and weekend work to accommodate production schedules and projects
- Scheduled factory shuts for critical infrastructure works
- Scheduled work timelines extending beyond planning dates affecting production
- Staff morale, work loads and maintaining standards

What did this mean to Damar going forward?

- Air Quality Improved— Major upgrade throughout the facility
- Gas Detection – World class
- Waste Water Management – World first
- Factory Reconfiguration – Major efficiency gains
- Electrical Upgrade & Certification – best in industry
- Believe we will be the first fully compliant facility of our industry – therefore a first mover advantage

- Tank Farm's Recertification – gives insured capacity
- Emergency Management Plans Upgrades - controls
- Rigorous Audits – compliance focused
- Future Proofing – for growth
- Intangible Benefits to come
- World Class Manufacturer – We now showcase our business

Do nothing? What it can mean?

- Business continuity for sure ...
 - E Simes Group
 - Road Marking Companies
- Staff Health & Safety risk and Exposure
- Potential Litigation for incidents

Going forward

- Like this session we are campaigning the industry to raise their standards of HASNO compliance
- EPA must enforce this legislation nationally
- For us it is important to have competition but it must be on a fair playing field
- Worksafe NZ, now have a new focused team and should facilitate this
- So again, we are asking industry to have a more proactive approach to compliance like we have
- So if sites are not compliant, simply issue a stop notice (ESG example)

Progress Snapshots













WARNING
FOAM INDUCTORS
BELOW





Presented by Martin Carlyle CEO

