

ENVIRONMENT, SAFETY, HEALTH & QUALITY FUNCTION

ANNUAL REVIEW ON SAFETY TO THE REGULATORY COMMUNITY

(CY 13)

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Author	Signature	Date
[REDACTED]	[REDACTED]	31 Jul 13
Authorised by:	Signature	Date
J Taylor	[REDACTED]	5 Aug '13

Revision History

Issue	Date	Significant Changes

This document is distributed in electronic copy only.

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1 INTRODUCTION

This meeting was the AWE annual presentation to the regulatory community.

The meeting notes comprise the following elements:

- A copy of all slides presented at the review
- Amplification of key points which were raised during the review as appropriate.
- A formal list of actions

Julie Taylor invited attendees to introduce themselves and gave an assurance moment which took the form of a personal reflection on the last year as Director ESH&Q. In summary:

- AWE's organisational focus continues to be developed to align to delivering the core mission. This has been enhanced by the (Target) Operating Model and functionalisation which went live on 2nd April 2013.
- Generally good progress is being made and the Incident & Injury Free workshops have brought a greater focus on leadership behaviours and accountabilities. However, there is still some way to go to strike the right balance between personal and process safety.

She then went on to introduce the general format of the presentations which would give an overview of performance, key regrets, learning and the forward focus.

[REDACTED] on behalf of the Regulators thanked AWE for the success of the previous years Annual Review of Safety and the open and honest language that was used. He requested that in future the Annual Safety Report be issued in advance of the formal meeting to allow time to review and digest the information.

Action: (CY14/01): Head of OEL

2 ATTENDANCE

The attendance status for all or part of the Meeting is outlined below:

Name	Organisation	Remarks
Mrs Julie Taylor	AWE Director Environment Safety Health and Quality	Chairperson
Mr [REDACTED]	HSE (HID) Regulator	
Mr [REDACTED]	DNSR	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED]	HSE Regulator	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED]	ONR Regulator	
Mr [REDACTED] [REDACTED]	EA Regulator	
Mr [REDACTED]	EA Regulator	
For AWE		
Dr [REDACTED]	Head of Applied Physics and Head of Technology Centre - Hydrodynamics	
Dr [REDACTED]	Explosives Safety Lead	
Dr [REDACTED]	Acting Head of Service, Major Hazards	
Dr [REDACTED]	Head of Environment Safety and Health	
Mr [REDACTED]	Head of Operational Experience and Learning	

Name	Organisation	Remarks
Mr [REDACTED]	Head of Construction ESH	
Mr [REDACTED]	Head of Transformation Programme	
Mr [REDACTED]	Programme Manager Major Projects	
Mr [REDACTED]	Head of Production Operations	
Mr [REDACTED]	Regulatory Interface Manager	
Mr [REDACTED]	Head of Assembly & Explosives Operations	
Mr [REDACTED]	Head of Environment	
Mr [REDACTED]	Site Manager Aldermaston	
Mr [REDACTED]	Head of Nuclear Safety	
Mr [REDACTED]	Head of Internal Regulation	
Mr [REDACTED]	[REDACTED]	[REDACTED]
Mr [REDACTED]	Pegasus Assurance System Manager	
Ms [REDACTED]	Operational Assistant to Director ESH&Q	
Ms [REDACTED]	ESH&Q Function	IT Provision
Mr [REDACTED]	Central Operating Excellence Team	Secretary

3 SLIDE PACK

The slide pack is attached in Annex A to this report and comprises all presentations delivered during the meeting.

4 KEY POINTS / OBSERVATIONS RAISED DURING THE REVIEW

The key points and observations are outlined against each presentation. A number of further observations were made during the close out session which are summarised in Annex B.

5 ESH PERFORMANCE

[REDACTED] gave an overview of ESH performance. There were no specific issues raised under this item.

6 TRANSFORMATION

[REDACTED] gave an overview of transformation.

The regulatory community gave a positive response to the implementation of the (Target) Operating Model and the level of engagement and communication with the regulators. They advised moving forward cautiously and that continued/early engagement with appropriate regulators should be maintained.

The ONR expressed an interest in seeing examples of how transformation has improved the organisation as it develops and matures.

7 MAJOR HAZARDS

[REDACTED] gave an overview of Major Hazard Operations

The regulatory community were complimentary of the approach to the development and deployment of Safety Cases on a Page (SCOAP) and this has helped lead the inspection regime for ONR. AWE is considered to be in the vanguard of industry. However, it is essential that SCOAPs become an effective part of normal working and are maintained under appropriate configuration control processes.

The ONR asked whether SCOAP has been rolled out across all of AWE's facilities. To date approximately 150 SCOAps have been produced, prioritised based on hazard, with those related to high hazard processes produced and delivered within an 18 month window.

The concept has been rolled out across AWE and now forms part of the AWE plc Company Arrangements.

[REDACTED], Head of Major Hazards, indicated that AWE would be undertaking benchmarking activities looking at other installations such as Pantex and Sandia National Laboratory in the USA for learning opportunities.

The explosives regulator was appreciative of AWE's involvement and contribution to the industry led Explosives Sector Leadership Group comprising the UK's principal explosives manufacturers.

8 INTERNAL REGULATION

[REDACTED] gave an overview of Internal Regulation

The regulatory community were encouraged by the direction AWE is taking with the development of its Internal Regulation regime and the opportunities for joint inspections with going forward.

The regulatory community did however raise an observation that AWE needed to ensure the IR process was implemented in a thorough manner as it had not identified a number of key issues which had been picked up by HID.

It was agreed that AWE would share the Review Learn Improve report on PEGASUS with the regulatory community.

9 OPERATIONAL EXPERIENCE AND LEARNING

[REDACTED] gave an overview on Operational Experience and Learning

The ONR expressed a perception that there was reluctance in some areas to raise INF1's. This view was not necessarily shared by AWE, but is useful feedback that would be investigated as the INF1 processes in still relatively new.

AWE is actively encouraging all personnel to be aware of their assurance responsibilities and to raise the appropriate observations by engendering a culture of transparency and "no blame". This also includes, if appropriate, the engagement of the regulatory community as early as possible.

The regulatory community requested that there was clarity over the definitions of Assurance Event and Assurance Observation Reports. This is being addressed in the current review of the LC7 arrangements.

10 SUMMARY

Overall the Regulators saw AWE's performance improving with good practice within construction safety, Sustainability Plans that were examples of best industry practice, achievements in ISO14001 and environmental baseline techniques, Internal Regulation and involvement with the Safety Directors Forum Working Groups and improvements in root cause analysis.

However there were a number of shortfalls to be addressed, particularly around the consistency and quality of documentation submissions.

11 LUNCHTIME PRESENTATION

[REDACTED] provided an illuminating and passionate presentation that outlined the purpose of, and some of the current issues surrounding the [REDACTED]. The regulatory community thanked [REDACTED] for his presentation and looked forward to understanding how some of the lessons learned have been embedded into future work. They also requested ongoing

communication to allow the regulatory programme to be aligned into the [REDACTED]

[REDACTED] re-iterated both his and his team's commitment to the AWE ethos of Safe, Secure and Clean operations.

12 SCIENCE & TECHNOLOGY

[REDACTED] gave an overview of Science and Technology

ONR advised that AWE should provide a comprehensive description of what facilities are to be used for when making future PRS submissions. This will enable the regulator to provide targeted advice.

13 SITE

[REDACTED] provided an overview of Site

A key observation was that one to one conversations with the regulator appear to be more productive and lead to a more frank and open dialogue than larger forums. All agreed to consider this as part of ongoing communications.

ONR commented that the regulators need to improve communication on the potential regulatory risk implications of AWE programme changes.

14 ASSEMBLY & EXPLOSIVES

[REDACTED] provided an overview of Assembly and Explosive Operations

HID requested that the regulators must be given adequate lead time in which to consider submissions. Changes to document or site visits dates should be communicated to the regulatory community as soon as possible to enable the regulator to re-schedule their work loads where possible.

This was illustrated with the [REDACTED] which has been delayed and is now impacting on the regulators resource availability.

15 FISSILE OPERATIONS

[REDACTED] gave an overview of Fissile Operations

ONR commented that early regulatory involvement with re-kit projects is important to ensure the right regulatory position. It was also indicated that it would be helpful to all parties if submissions could be grouped in order to reduce the processing and review times.

16 CAPITAL PROJECTS

[REDACTED] gave an overview of Capital Projects

ONR requested AWE supply a consolidated list of major projects submission documents together with the planned submission dates.

ACTION: CY/14/02: [REDACTED]

17 REGULATORS SUMMARY

ONR

- Regrets as presented were broadly agreed and were accurate and as expected
- Right behaviours are being demonstrated at senior levels within AWE
- Need to improve the quality and consistency in relation to some document submissions
- Response to incidents is good

There is a need to develop a common understanding of terminology

With regard to the presentations:

- Messages are positive
- A lot of information was presented. The issuing of the annual report prior to the meeting would enable all to review and provide quality input and comment and should be considered in future
- Positive response to AWE internal regulation activities
- Language used in the formal written report should reflect the openness and honesty demonstrated during the formal meeting
- It was a good meeting although there may be some recommendations to change the format for the future

HSE

The HSE expressed interest in incidents which result in injury when hazardous materials are involved

EA

Reiterated the importance of:

- Early engagement
- Quality of submissions
- AWE to continue to strive to become an "Intelligent Operator"
- AWE should consider producing a compliance statement against all appropriate regulatory requirements

18 WASH UP

Julie Taylor thanked the regulatory community for their help in ensuring AWE continues to meet its licence conditions and other statutory commitments and for providing timely support when requested.

The regulatory community also expressed its thanks to AWE for the commitment and effort provided to make this annual review meeting a success.

19 ACTION MANAGEMENT

The list of actions is shown at Annex C.

20 LIST OF ANNEXES

20.1 Annex A: Review Slide Pack

20.2 Annex B: "POST IT" Capture Sheet

20.3 Annex C: List of Actions

21 REFERENCES

Meeting Terms of Reference (TBC)

Annex A

REVIEW SLIDE PACK

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Annual Review of Safety Contract Year 13

1st April 2012 to 31st March 2013

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Agenda

Company Performance

- 11:00: Welcome and Today's Key Messages
- 11:10: Assurance Moment
- 11:15: ESH Performance
- 11:30: Transformation
- 11:40: Major Hazards (Process, Nuclear, Explosive, Environment)
- 12:05: Internal Regulation
- 12:15: Learning from Experience
- 12:30: Questions / Feedback

Julie Taylor

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Stakeholders

Operational Performance

- 12:45: Working Lunch / Programme overview
- 13:45: Science & Technology
- 14:05: Assembly & Explosives
- 14:30: Fissile Operations
- 14:55: Coffee Break
- 15:10: Major Projects
- 15:35: Sites Programme
- 16:00: Overview
- 16:15: Questions / Feedback / Work going forward
- 16:30: Meeting Close

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
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[REDACTED]
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AWE

AWE Executive Team

AWE Organisation



Managing Director
Andrew Jupp



Director, Project Delivery
Philip Ashman



Director, Commercial
Rob Fletcher



Director, Site
Haydn Clulow



Director, Programme Assurance
Paul Taylor



Director, Systems Engineering
David Filbee



Director, Environment,
Safety, Health and Quality
Julie Taylor



Director, Science & Technology/
Production Operations
Graeme Nicholson



Director Human Resources
Shan Martin



Director Finance and
Shared Services
Peter Morton

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AWE

AWE Key Themes & Messages

- Programme Delivery Focus / Context
- Performance Improvement
 - Conventional Safety
 - Process Safety
 - Hazard and Risk Reduction
- Transformation – Delivering Excellence
 - Organisation
 - Leadership
 - Culture
- Vision and Way Forward

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AROS Objectives & Review

- Presentation material covering review of CY13 (1st April 2012 – 31st March 2013), including
 - Successes
 - Regrets and Learning
 - Actions taken and Continuous Improvement activities initiated
 - CY14 look-ahead / focus / priorities
- Structured Discussion
 - Summary of key messages
 - Recognition of strengths / best practices
 - Identification of any gaps / latent weaknesses
 - "Case for Continued Operation" debate

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Julie Taylor

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Stakeholders

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Julie Taylor

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Stakeholders

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]


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ESH Performance Overview

Successes

- Process safety
- Construction ESH performance
- Leading performance indicators
- Response to the fire in 3rd August 2010
- Transformation activities
- Key agreements with regulators [REDACTED]
- Facility Monitoring Tools & SCOAP
- Our ESH Culture
- [REDACTED]
- Explosive Sector and SDF Safety Case Sub Group Leadership
- Continuation of risk reduction through capital build
- ISO 9001 Recertification

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ESH Performance Overview

Regrets

- HID prosecution
- ONR Improvement Notice re A45
- Tritium in North Ponds
- OSHA statistics
- Maintenance and asset integrity regime
- Pace with respect to HAW (SILW) and movement control arrangements
- Consistency of investigation and learning
- Relationship and communications with regulators on specific subjects
- Flexible permissioning

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ESH Performance Overview


Forward Focus/Challenges

- [REDACTED]
- PRS activities for key areas
- Capital build and transition to new facilities [REDACTED]
- Asset integrity and maintenance regimes
- Mk4a assessment
- ESH Culture Behaviours
- Regulatory relationships and environmental focus
- Closer integration of ESH&Q – leading quality indicators

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 CONFIDENTIAL Agenda	
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 CONFIDENTIAL Transformation	
<p>The main work streams are:</p>	
<ul style="list-style-type: none"> ▪ Target Operating Model – improved accountability and safety of operation through task and line management ▪ Control Framework – improved accountability through standardisation and process configuration management ▪ Business Performance Management – improved measures through visible techniques and identifying cause and effect leading to safer operation 	
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Transformation

Our Operating Model

Programmes
Reflects the Work Breakdown Structure

Functions
Reflects the Organizational Breakdown Structure

Function	Strategic Programmes	Workload Understanding Technologies	Costs	Capital and R&D Projects	Enabling Work	Non M&O Work
Production						
Support						
System Engineering						
Manufacturing						
Commercial						
HR						
Finance						
Shared Services						
Site						
Regulatory & Project Safety						

Projects:

- Meet customer requirements.
- Define and manage the work breakdown required to deliver solutions.
- Are accountable for the deliver of solutions to time cost and quality, whilst managing scope, risk and benefits.
- Provide functions with requirements during the project estimating phase regarding resources, deliverables and costs.
- Own the external customer relationship.

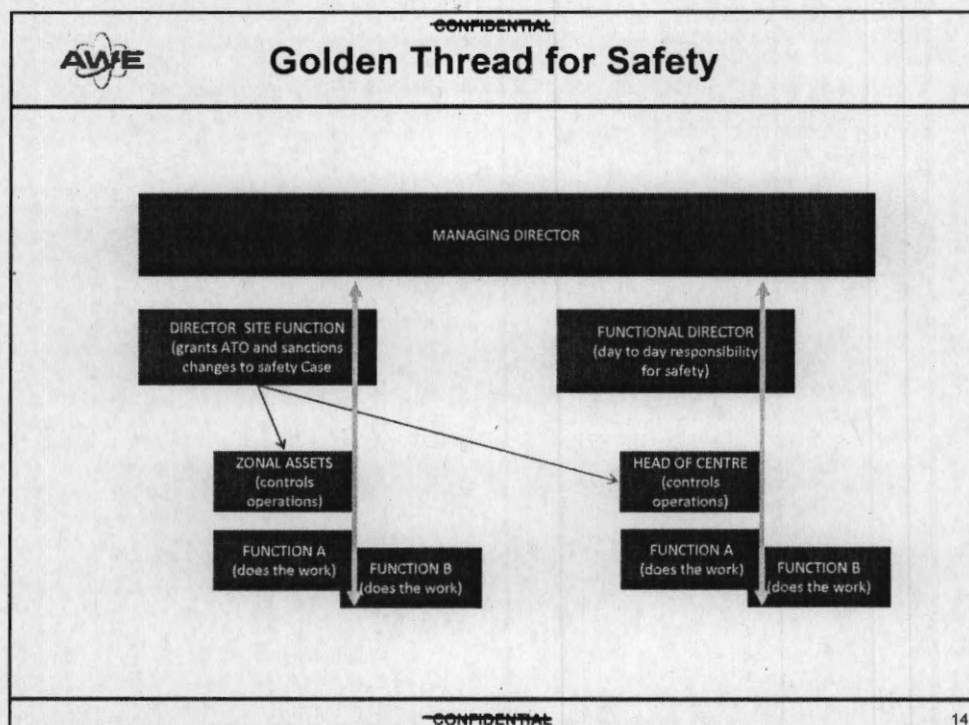
Functions:

- Provide resources to deliver projects.
- Ensure an enduring capability.
- Own and optimise people resources.
- Own policies, processes, procedures.
- Which are fit for purpose, measurable, available and complied with.
- Plan capability, resource and career development.

+ larger view attached.

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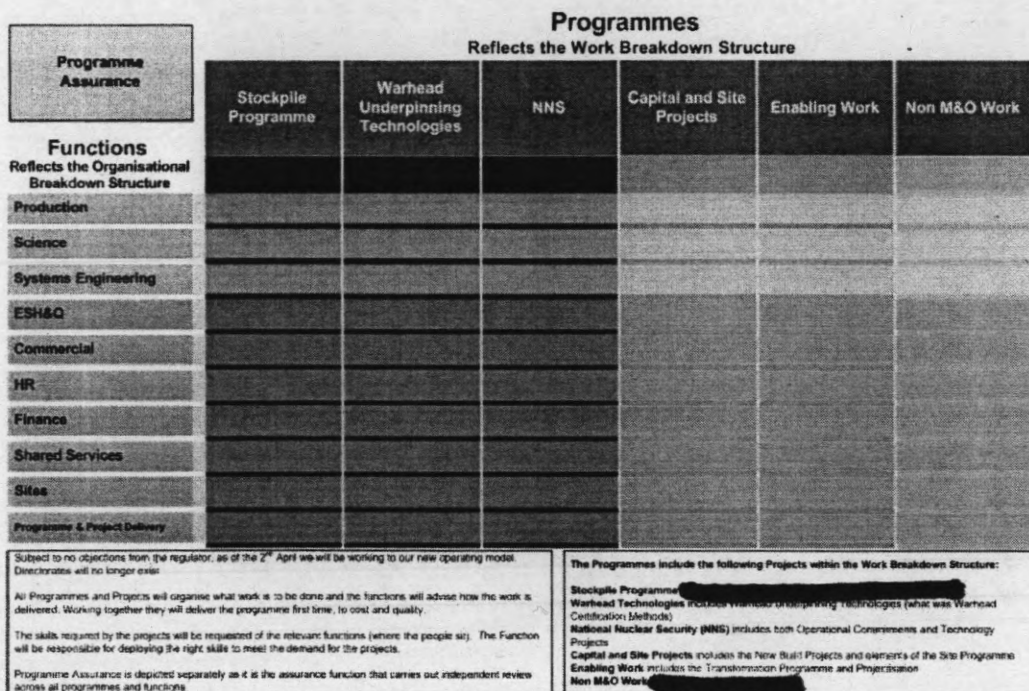




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Transformation

Our Operating Model



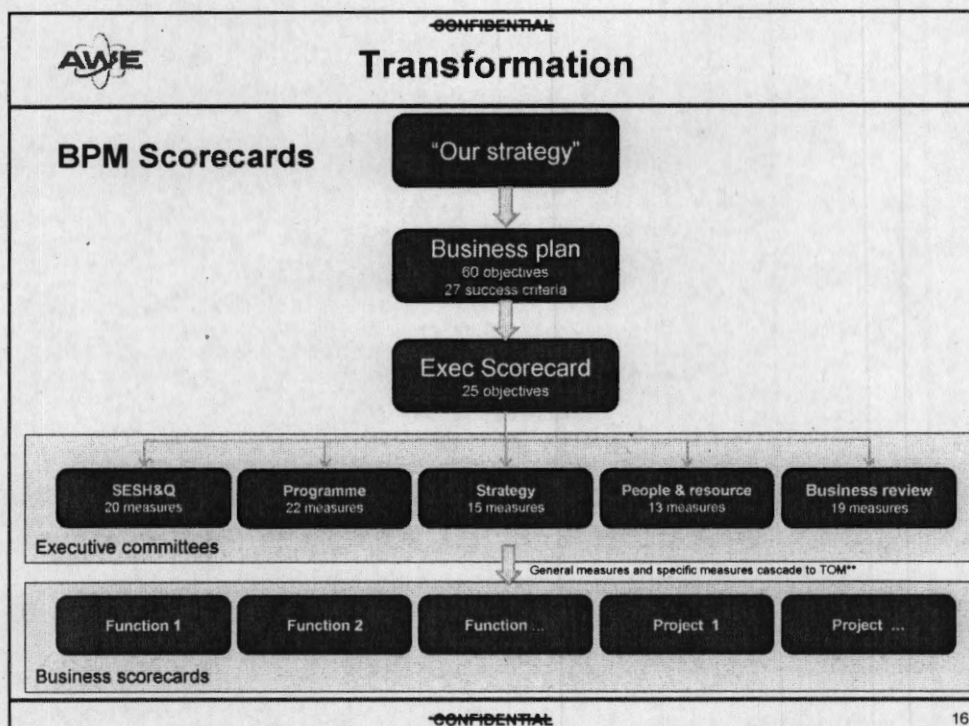
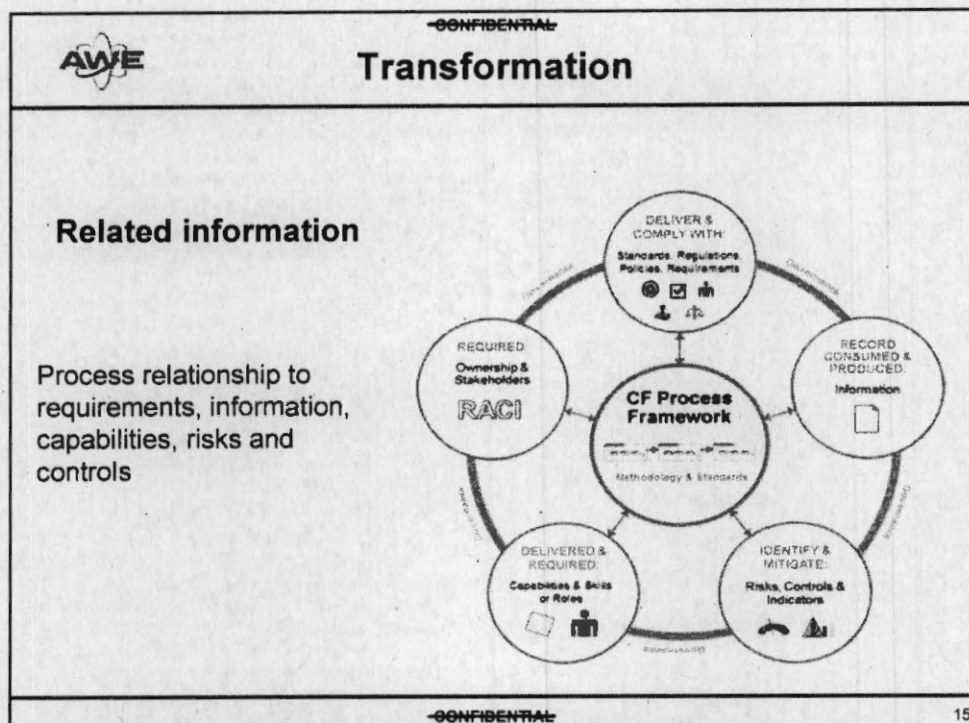
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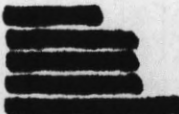
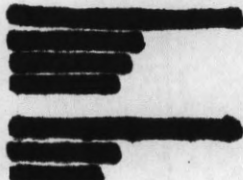
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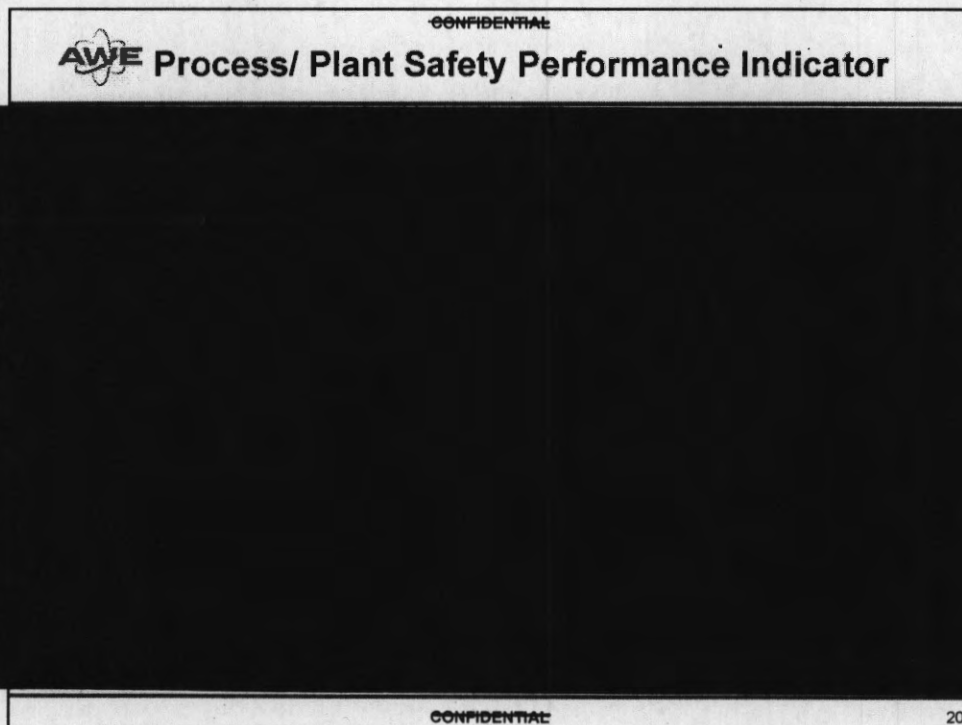
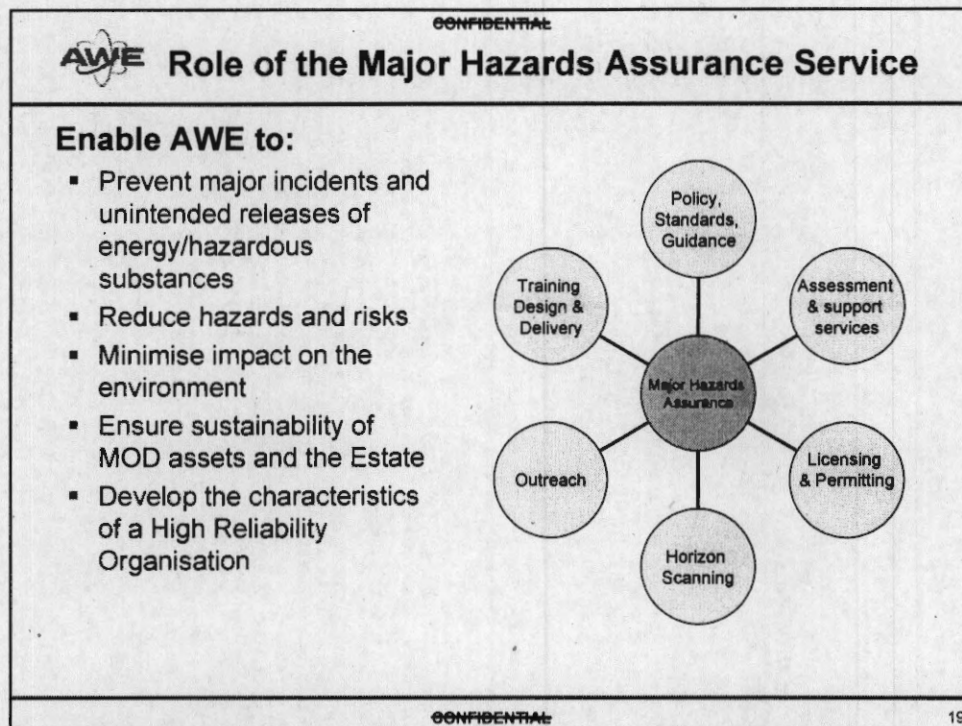
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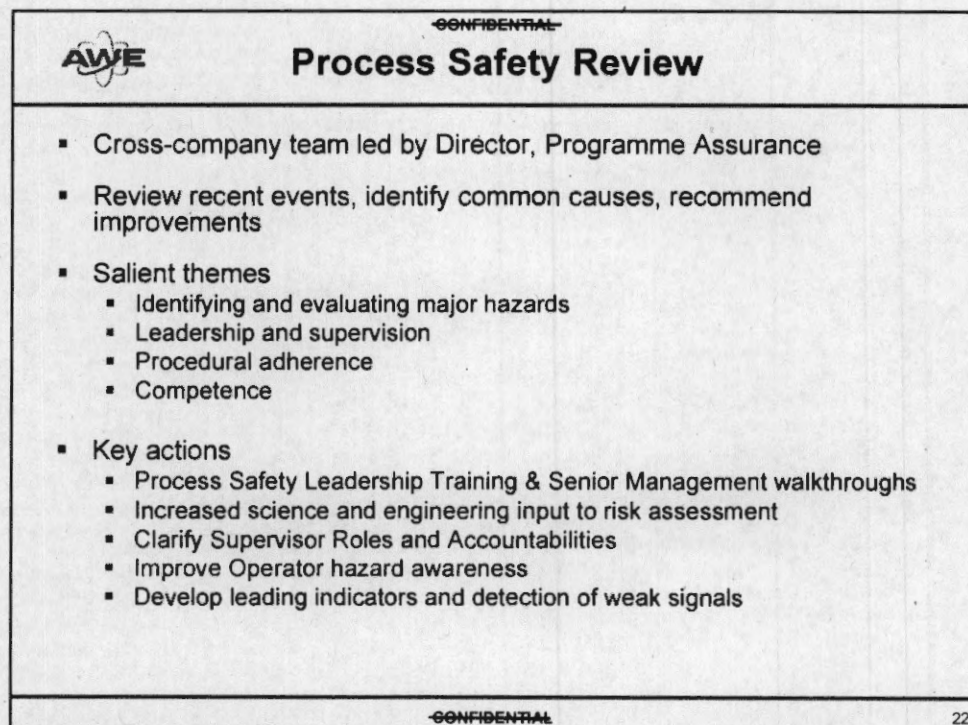
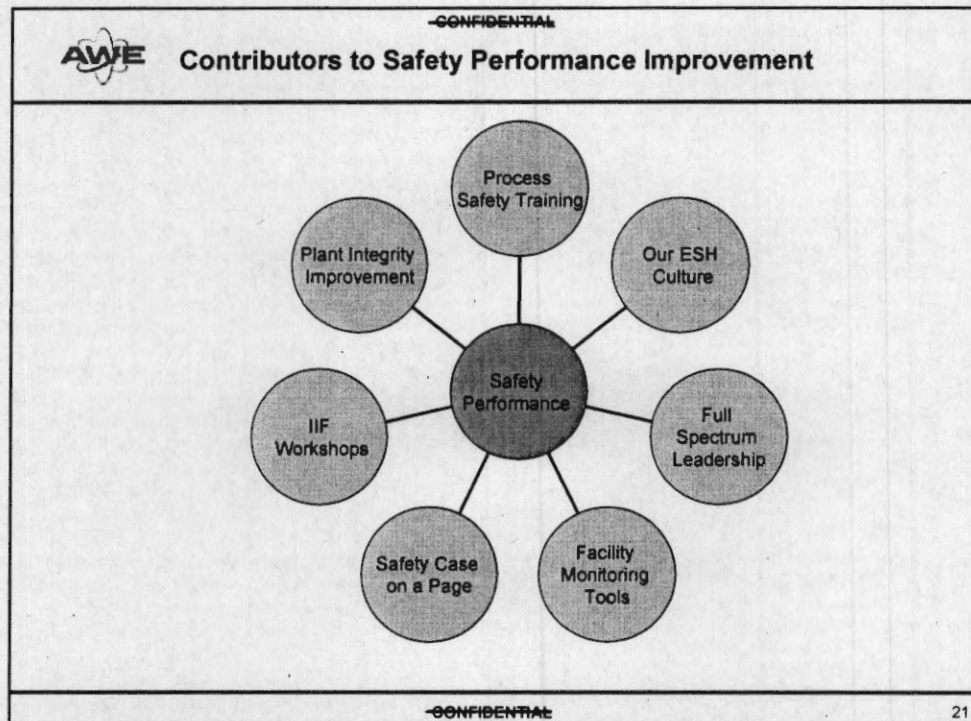
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	CONFIDENTIAL Transformation
Next Steps <ul style="list-style-type: none"> ▪ Embedded and refine TOM – help AWE show greater delivery and safety performance ▪ Step up delivery of the Control Framework – simplified and streamlined delivering clear accountabilities ▪ Launch transparent performance measures across the business to improve safety and reduce risk ▪ Develop a framework for prioritised process improvement with OE to further improve our safety, security and performance 	
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	CONFIDENTIAL Agenda
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Improved integration

- Significant activity across AWE relevant to control of Major Hazards
 - asset management
 - facility and process design engineering
 - leadership and operator development
 - information management
 - safety justification
- Benefit in integration
- Study initiated to scope project
- Benchmark against recognised standards and identify improvements

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Progress & Achievements

- [REDACTED] good engagement following initial uncertainty
- Inter-industry liaison through SDF pursuing a number of work-streams
- Fukushima: action closeout and cross-enterprise engagement
- SEVESO III plans in place
- Formation of Explosives Sector Leadership Group
- Sustainability Plan in place
- ISO 14001 Re-certification

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Future focus

- Support to [REDACTED]
- Improved risk assessment and safety justification
- Hazard reduction
- Development of leading indicators
- Leadership capabilities and leadership engagement
- Supervisor & operator awareness and competence
- 'Keeping up the drum-beat' – Learning from disasters
- Transition to new facilities, [REDACTED] Epure
- Environment action plan
- Sharing good practice
- Improved integration across the business

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Julie Taylor

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All

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Internal Regulation

- Internal Regulation Service Improvements
 - Team strengthened to include WH Safety Expertise
 - Peer Review reports more challenging
 - Topic surveillance integrated with corporate audit programme
 - More customer focused
 - Regulatory Interface Lead

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Internal Regulation

- Observations from Internal Regulation Activities
 - CfCO Reports
 - Staged Safety Reports
 - Delivery
 - Behaviours
 - Links with External Regulators

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Agenda

Company Performance

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- 11:10: Assurance Moment
- 11:15: ESH Performance
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- 11:40: Major Hazards (Process, Nuclear, Explosive, Environment)
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- 12:15: *Learning from Experience*
- 12:30: Questions / Feedback

Julie Taylor

Stakeholders

Operational Performance

- 12:45: Working Lunch / Programme overview
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All

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Operational Experience & Learning

What is OEL?

In simple terms knowledge capture and its effective use

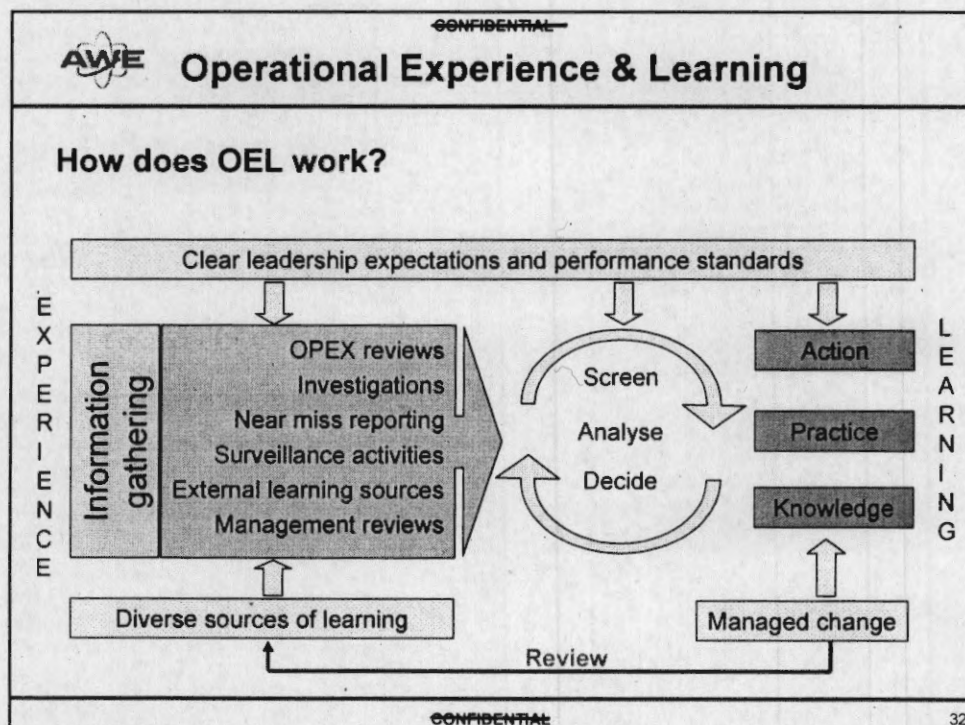
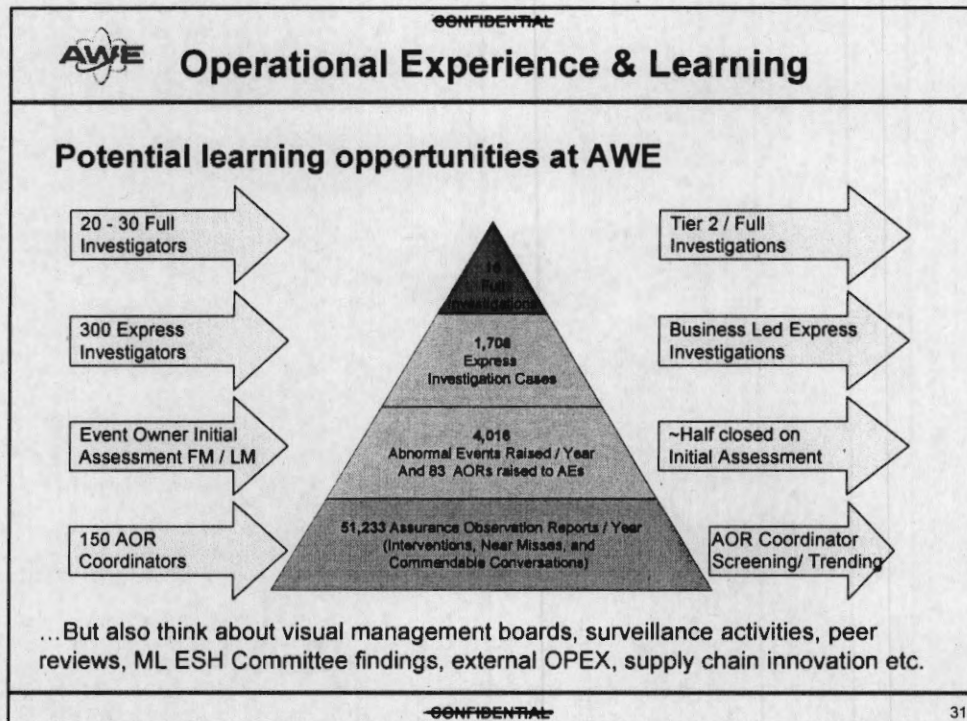
- External reference standards from WANO, INPO, OEL Working Group members etc.
- Expectations from Regulators – ONR Technical Position Statement on Organisational Learning

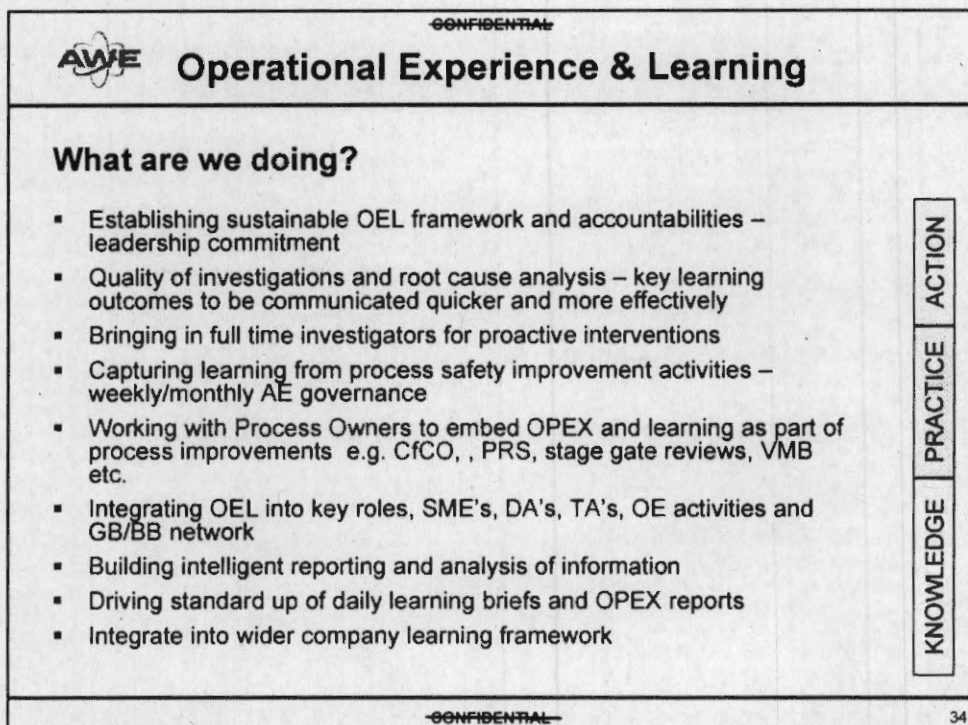
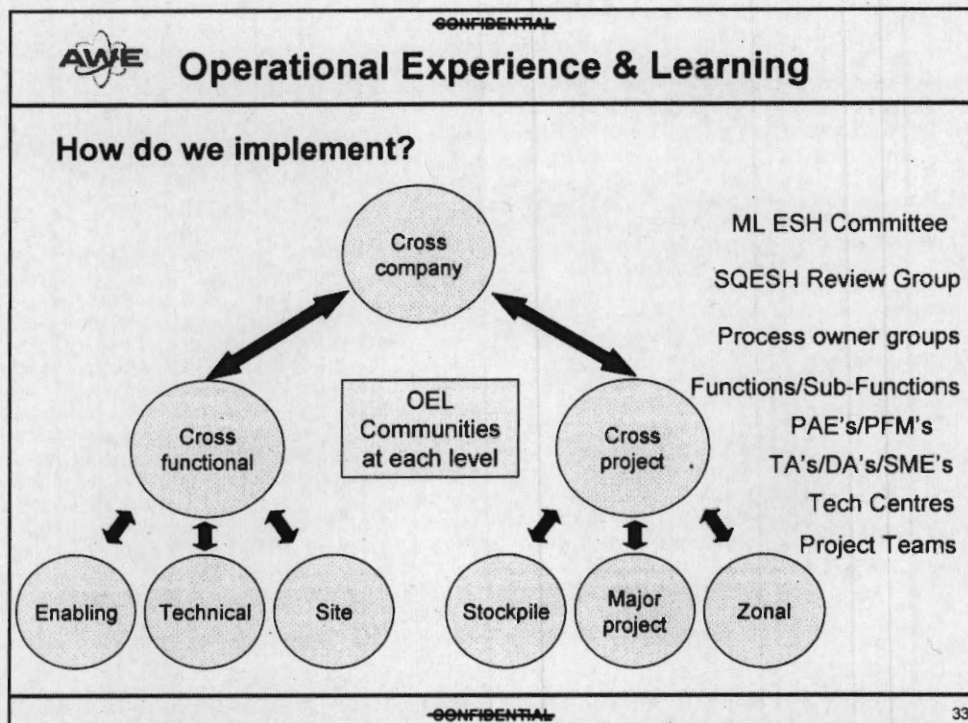
Why do we need it?

- Avoid repeat events and associated impacts, costs and disruption
- Get accountabilities for embedding learning to the right parts of the organisation

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Operational Experience & Learning

What benefit will it bring?

- Reduction in accidents and incidents through right first time
- Associated quality improvements
- Quicker transfer of knowledge across organisation
- Clarity of accountabilities in operating model
- Value capture/efficiencies
- More sustainable organisation and supply chain
- Improved confidence and reputation

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Julie Taylor

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Stakeholders

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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DPO Leadership ESH Plan 2013


"The pride our people take in performing all aspects of their work is influenced by their Leadership community, the tools and opportunities they're provided and their environment"

WE CARE

WE LEAD


PRIDE


- **Highly visible leadership, leading by example**
- Clear expectations and personal commitment
- Tools: Data analysis, the Belt community, Process Safety, Walk-downs, Validation, EPIP
- the expertise of the ESH&Q Function
- Focus on supervisors
- Focus on working environment



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 CONFIDENTIAL Science and Technology	
Operational Performance	
<ul style="list-style-type: none"> ▪ Improvements in Explosive Safety w.r.t. [REDACTED] ▪ HD <ul style="list-style-type: none"> ▪ [REDACTED] Future experiments of this type will now be undertaken in EPURE. ▪ Successful demonstration of SITEX ▪ MSRD <ul style="list-style-type: none"> ▪ [REDACTED] new safety case issued and implemented ▪ [REDACTED] operating instructions re-written as part of new safety case and viewed as best practice ▪ PPD <ul style="list-style-type: none"> ▪ Orion Commissioning completed and Operations underway following ATO which was commissioned in March 2013 ▪ PPD - VIPER POCO 75% complete 	
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Science and Technology

Regrets and Learning

▪ Hydrodynamics

- Extensive 'tidy up' activity following recognition that housekeeping standards had fallen to an unacceptable level
- [REDACTED] Safety Case delayed due to other priorities
- Significant injury (broken ankle) due to slip on external staircase – combination of individual behaviour and design of construction enclave

▪ MSRD

- [REDACTED]
- [REDACTED] PRS – completed but ONR concerns over documentation and decision delayed
- [REDACTED]

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Science and Technology

Regrets and Learning

▪ Plasma Physics

- VIPER [REDACTED]
- Orion Commissioning completed has highlighted [REDACTED] and costly replacement of chiller system has been undertaken
- Significant AE's involving overturned Jib Crane and full investigation on scaffolding and temporary access structures in Orion. Learning related to design and installation considerations on both accounts as the jib crane was being moved between floors to handle Diagnostics.

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Science and Technology

Forward Focus

- HD – Preparations for handover of TDC
- HD – [REDACTED] Safety Case implementation
- Materials Sub-Function – Continuing discussions with ONR on [REDACTED] PRS and associated issues;
- Culture – focusing on
 - Increased management visibility in workplace (hazard reduction, safety conversations, SSOW compliance)
 - Housekeeping using 6S process
 - Introduction of best practice from construction areas e.g. highly visible messaging, ESH staff on plant
 - Safe Science workshops

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Julie Taylor

[REDACTED]
[REDACTED]
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[REDACTED]
[REDACTED]
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[REDACTED]
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	Assembly & Explosives
Performance	
Safety	
<ul style="list-style-type: none">▪ Close out of the 11 fire recommendations▪ [REDACTED]▪ [REDACTED]▪ [REDACTED] replaced and commissioning complete in [REDACTED] roll-out programme [REDACTED]▪ Facility Monitoring Tools programme embedded and adherence to programme achieved. Trend analysis shared corporately to identify improvement opportunities▪ Review of legacy waste conducted – Disposal plan formulated▪ ESH Culture survey and forward action plan▪ Review of Risk Assessments / Safety Basis and ownership	
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45	

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	Assembly & Explosives
Performance	
Operations	
<ul style="list-style-type: none">▪ Manufacturing<ul style="list-style-type: none">▪ [REDACTED]▪ [REDACTED]▪ [REDACTED]▪ Projects / Re-kits<ul style="list-style-type: none">▪ MENSA▪ CIRCINUS▪ [REDACTED]▪ Cygnus	
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AWE


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Assembly & Explosives

Regrets

- [REDACTED] - AE
 - [REDACTED]
 - [REDACTED]
- [REDACTED]
 - [REDACTED]
 - [REDACTED]
- Legacy issues – Plant & equipment standards due to ageing infrastructure

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AWE


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Assembly & Explosives

Learning

- Increased visibility and intelligence capture from risk based inspections with improvement opportunities identified, implemented and tracked on For@ction.
- Process safety reviews – integrated engineering, safety and operational approach.
- Enhanced communication via Visual Management Boards (VMBs) at all levels used on a daily basis.
- Lack of suitable skill-set for ESH function – need to educate people in hazard awareness and safety case / safety basis and risk assessment process.
- Need to ensure integrated configuration management and control.

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Assembly & Explosives

Forward Focus

Safety


- [REDACTED]
- [REDACTED]
- [REDACTED]
- Review and update Explosives Hazards Data Sheets
- Explosives Stocktake / Accountancy
- Formalisation of specialist risk assessment – competencies and quality of submissions
- Development of Supervision and competency standards and training

Operations

- MK4A operations
- Handover of [REDACTED]
- Transition into [REDACTED]

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Julie Taylor

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Stakeholders

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Fissile Operations

Performance - Safety

- A90 PRS closed out with ONR April 2012
- [REDACTED] further improvements and [REDACTED] project running [REDACTED]
- Safety Case on a Page in place for all operational processes in the Asset.
- Programme to replace [REDACTED] successfully completed ahead of programme
- Our ESH Culture data gathering and analysis completed across the Asset and implementation workshops in progress
- Configuration Management Plans established across the Asset

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Fissile Operations


Performance - Operations


- [REDACTED]
- [REDACTED]
- [REDACTED] operationally available throughout the year
- [REDACTED] of feedstock supplied by [REDACTED]
- [REDACTED] radiography process transferred from [REDACTED]
- [REDACTED] pending structural remediation
- [REDACTED]
- Continuing Rekit projects enhancing safety, capability and capacity
- Full Scale Test Facility handed over to User


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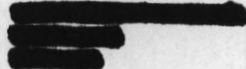
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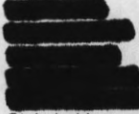


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Fissile Operations	
Regrets & Learning Regrets	
<ul style="list-style-type: none"> ▪ [REDACTED] ▪ Subsequently Improvement Notice received from ONR in December ▪ Delayed transfer of [REDACTED] ▪ False criticality alarm activation at A45 in November [REDACTED] ▪ A fissile move through an extended criticality boundary transgressed the CCC leading to [REDACTED] in November - no mass limits exceeded ▪ Significant injury to an individual [REDACTED] in October 2012 at the [REDACTED] highlighted issues around work control and [REDACTED] ▪ Overheated bearing failed in [REDACTED] in January 2013 revealed issues on preventative maintenance regime 	
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Fissile Operations	
Regrets & Learning Learning	
<ul style="list-style-type: none"> ▪ Maintained programme of process surveillance and walkdown programmes as part of Facility Monitoring Tools ▪ Introduced 6S process into A90 ▪ Strengthened the arrangements for moving fissile material [REDACTED] ▪ Continue the Working Together meetings with our Safety Reps and in future include the wider Technology Centre ▪ Improved the management, control and supervision of Material Controllers [REDACTED] ▪ Continued to improve quality of assurance and operational documentation ▪ Improved storage arrangements for r/a contaminated liquid wastes in [REDACTED] 	
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Fissile Operations	
Forward Focus	
Safety	
<ul style="list-style-type: none"> ▪ Licence Instrument granted and implementation underway of programme to remediate A45 column structural issues, working towards close out of the ONR Improvement Notice and to return the facility to an operational state ▪ Deliver outputs within Our ESH Culture framework in A90 and A45 and roll-out to rest of Tech Centre facilities ▪ Pilot Process Validation activity on [REDACTED] process in [REDACTED] ▪ Implement strategy to reduce in-line fissile material holdings within [REDACTED] ▪ Undertake the next [REDACTED] PRS programme ▪ Complete safety justifications to enable transfer of [REDACTED] 	
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Fissile Operations	
Forward Focus	
Operations	
<ul style="list-style-type: none"> ▪ Manufacturing <ul style="list-style-type: none"> ▪ Undertake a Restart programme [REDACTED] ▪ [REDACTED] ▪ Production Process Improvements <ul style="list-style-type: none"> ▪ [REDACTED] ▪ [REDACTED] ▪ [REDACTED] ▪ Quality improvements ▪ Continue the Rekit projects 	
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<h2>Major Projects</h2>	
ESH Performance <ul style="list-style-type: none"> ▪ Hours worked – 3.75 million (April 2012 to March 2013) ▪ Injuries – 1 x RIDDOR/Days Away Case – 3 x OSHA Medical Treatment Cases – 1 x OSHA Days Away case - 32 x First Aids ▪ AORs Raised – 33,776 (Average of 2,815 per month) ▪ Total Recordable Injury Rate April 2012 – 0.41 March 2013 – 0.38 ▪ First Aid Injury Rate April 2012 – 4.17 March 2013 – 2.09 	
Headlines <ul style="list-style-type: none"> ▪ Apr 2012 – RoSPA Gold Medal (6 consecutive Gold Achievement Awards). ▪ Sep 2012 – British Safety Council 5 Star SMS Audit – 5 Stars. (2nd Award) ▪ Oct 2012 – British Safety Council – Sword of Honour (International). (2nd Award) ▪ Oct 2012 – British Safety Council - 5 Star EMS Audit – 5 Stars (1st Award) ▪ Dec 2012 – Mensa Project – 1 calendar year without an OSHA Recordable. ▪ Feb 2013 – Projects Group – 12 months without an OSHA Recordable ▪ Mar 2013 – Lowest First Aid / All Injury Rates for construction since recording. 	
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Regrets <ul style="list-style-type: none"> ▪ Pegasus PCSR 2 submission and regulatory relationship ▪ One RIDDOR Injury and Four OSHA recordable injuries: <ul style="list-style-type: none"> - Fractured thumb when struck with a hammer, May 2012 (TDC) - Struck by concrete pump hose, June 2012 (TDC) - Cut to finger and thumb with hand saw, Nov 2012 (BH) - Hand trapped between two steel beams, Sept 2012 (Phoenix) - Cut above top lip when hit with re-bar, March 2013 (Mensa) 	
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	CONFIDENTIAL Major Projects
Learning <ul style="list-style-type: none">▪ Introduction of a weekly Construction OEL brief.▪ Improved learning between major Projects and Projects Group ESH practices. Resulting in excellent ESH performance in Projects Group.▪ Environmental awareness training rolled out for construction following series of events.▪ Improved governance over the Construction phase of projects with the introduction of the Construction ESH Review Panel.▪ Improved performance with excavations following re-SQEP of our excavation supervisors and re-writing MSP 715	
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	CONFIDENTIAL Major Projects
Forward Focus <ul style="list-style-type: none">▪ Deliver the AWE Culture programme to all in Capital Projects.▪ Utilise our Soft Signals (leading indicator) data to be more proactive in identifying trends across our sites.▪ Supporting Transition to Operations▪ Supply Chain improvements▪ Continue to improve our TRIR.	
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Major Projects

Forward Focus (2)

- Licence Instrument for Pegasus PCSR 2
- Submission of MENSA PCSR 3
- Submission of Pegasus PCSR 3
- Revised Safety Case Delivery Strategy for MENSA
- Shared best practice MENSA
- Timely delivery/release of hold points
 - Quality of submission
 - Delivery to schedule
 - Effective use of level 4 RIMs – no surprises

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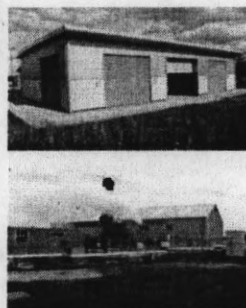
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~~CONFIDENTIAL~~**Site****Performance - Operations**

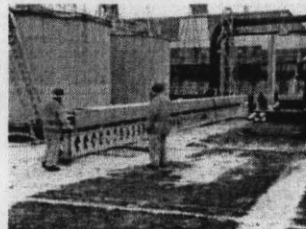
- Management and control of radioactive sources
- [REDACTED] & OWMG decommissioning – A Perfect Year for both projects
- Logistics – authorisation & forthcoming legislation changes
- Hazard Reduction
 - Radiological End Point reached for [REDACTED]
 - 4 x glove boxes size reduced in [REDACTED]
- Decommissioning overview
- Utilities – CfCO and new build
- Engineering LC28 and LC22 ONR Enhanced Inspection arrangements fit for purpose
- TOM and baseline changes

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~~CONFIDENTIAL~~**Site****Performance - Operations**

- Initiated engineering plant integrity programme
- Pilot studies including improvements to plant and equipment maintenance
- RA characterisation of the OWMG Package 1 buildings
- A total of 32 gantry spans were removed from OWMG
- Asbestos strip of OWMG buildings commenced
- 221 bags = 3 x 8yd skips of MMMF removed and despatched as "out of scope" from OWMG
- Asbestos strip of [REDACTED] commenced and REP attained

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	CONFIDENTIAL Site
<h3>Performance - Safety</h3> <ul style="list-style-type: none"> ▪ [REDACTED] ▪ [REDACTED] ▪ [REDACTED] ▪ Site PRS close out ▪ Fukushima recommendation completion ▪ Radiological Protection <ul style="list-style-type: none"> ▪ Continued dose reduction in high hazard facilities whilst [REDACTED] ▪ Implementation of electronic system for undertaking radiation/contamination surveys ▪ Improved monitoring capability for emergency response under LC11 ▪ Update of Site Emergency Plans for Aldermaston and Burghfield; Submission of revised REPIR Report of Assessment for AWE Aldermaston ▪ Shift Review – clear accountabilities identified and exercised. 	
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	CONFIDENTIAL Site
<h3>Regrets and Learning</h3> <ul style="list-style-type: none"> ▪ Forward area emergency control arrangements are under review following learning from a number of exercises ▪ Pace of change – [REDACTED] programme, SILW ▪ Radiological Protection <ul style="list-style-type: none"> ▪ Linkage between HP surveys and LC34 needs to be strengthened ▪ Radiation Protection Supervisors remain under utilised – need to be more involved in RP decision making ▪ ³H in North Ponds. ▪ Omission to produce report for Natural England as a condition of Habitat Management Licence. ▪ HAW Programme progress ▪ Early engagement with Regulators ▪ LC 32 detailed inspections 	
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Site

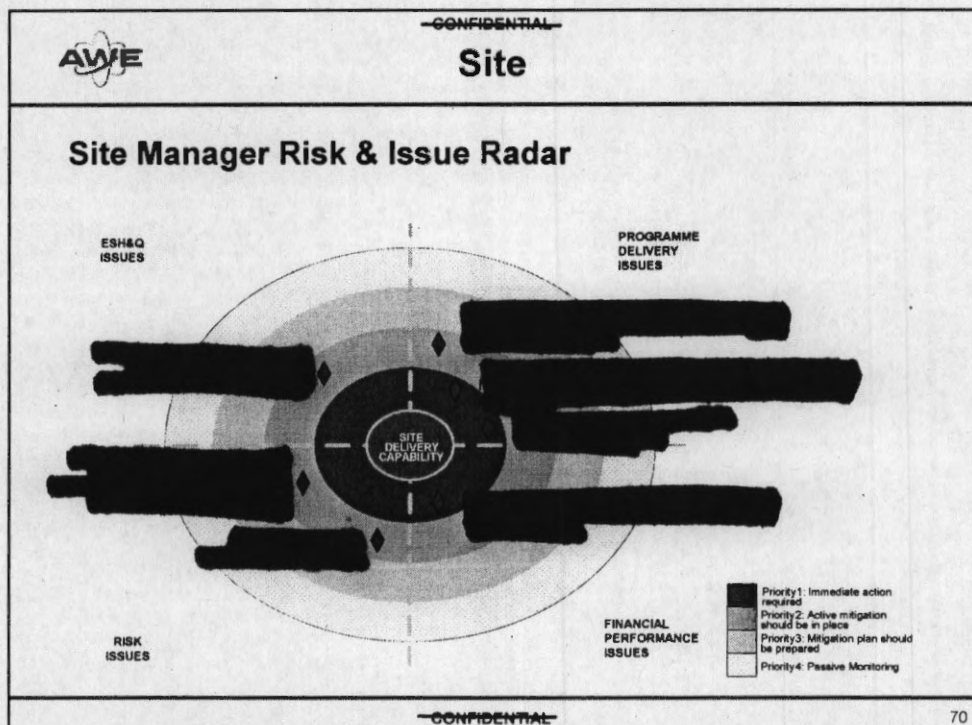
Forward Focus

Safety

- Develop nuclear and environmental baselines and configuration control
- Improve capability competency/training & align demands with service provision
- SIA on safety basis process to ensure increase safety benefit and value
- SILW programme
- Corporate PRS programme
- Change to the methodology for demonstration of emergency arrangements at AWE(B), then AWE(A)
- Site Control - Control Room Strategy
- Control of releases under LC34
- Implementation of new dosimetry reporting system (DRAWE)
- Commencement of [REDACTED] Safety Case update
- Continued reduction in LC32 holdings (Temporary accumulated waste)
- Continuing with Nuclear Fire Risk Assessment – [REDACTED] Trial facility

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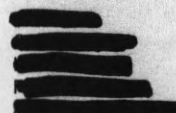
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~~CONFIDENTIAL~~**Agenda****Company Performance**

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Julie Taylor



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All

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AWE Overview – Key Lessons Learnt	
<ul style="list-style-type: none">▪ CY13 saw<ul style="list-style-type: none">▪ Some improvement in ESH performance in some key areas has improved▪ Continued hazard reduction through decommissioning programme and re-kit projects and steady progress against the capital improvements programme (new build)▪ Some key industry leading approaches being taken with respect to culture and worker engagement▪ But.....▪ CY13 has been a challenging year for the Company:<ul style="list-style-type: none">▪ Despite improvement ESH performance [REDACTED]▪ [REDACTED]▪ [REDACTED]▪ [REDACTED]▪ [REDACTED]▪ Stakeholder Communications	
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AWE Overview – AWE looking forward	
<ul style="list-style-type: none">▪ Key operational issues to be finalised▪ PRS activities▪ Capital build and transition to new facilities▪ Asset integrity and maintenance regimes▪ Mk4a assessment▪ Further develop functions▪ Quality & OEL▪ Regulatory relationships and environmental focus	
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Agenda

Company Performance

- 11:00: Welcome and Today's Key Messages
- 11:10: Assurance Moment
- 11:15: ESH Performance
- 11:30: Transformation
- 11:40: Major Hazards (Process, Nuclear, Explosive, Environment)
- 12:05: Internal Regulation
- 12:15: Learning from Experience
- 12:30: Questions / Feedback

Julie Taylor

Stakeholders

Operational Performance

- 12:45: Working Lunch / Programme overview
- 13:45: Science & Technology
- 14:05: Assembly & Explosives
- 14:30: Fissile Operations
- 14:55: Coffee Break
- 15:10: Major Projects
- 15:35: Sites Programme
- 16:00: Overview
- 16:15: Questions / Feedback / Work going forward
- 16:30: Meeting Close

AIR

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Julie Taylor

Stakeholders

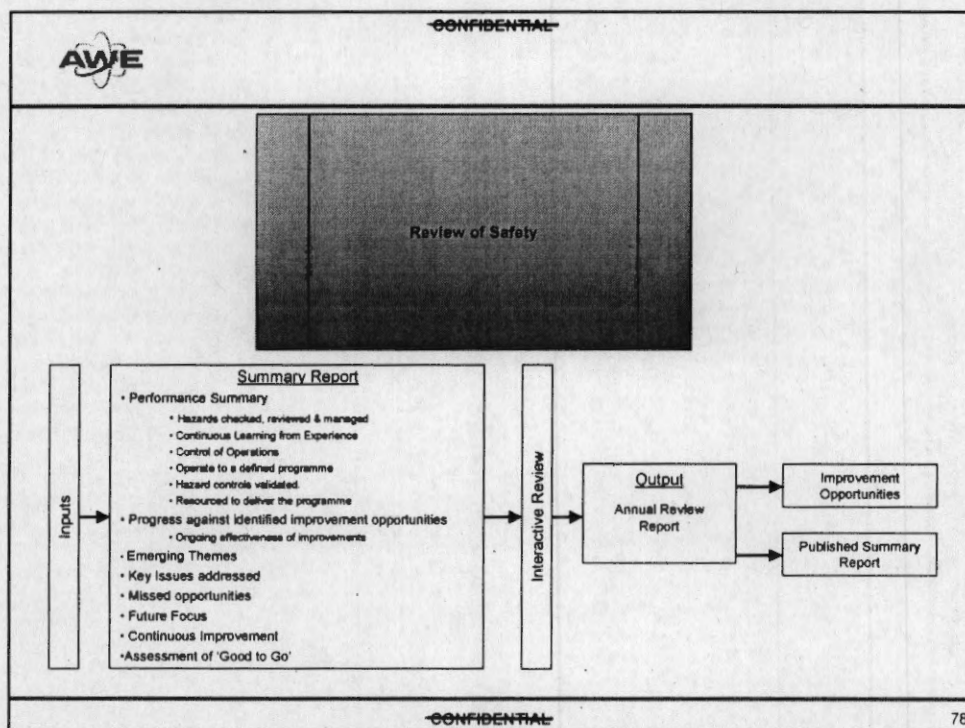
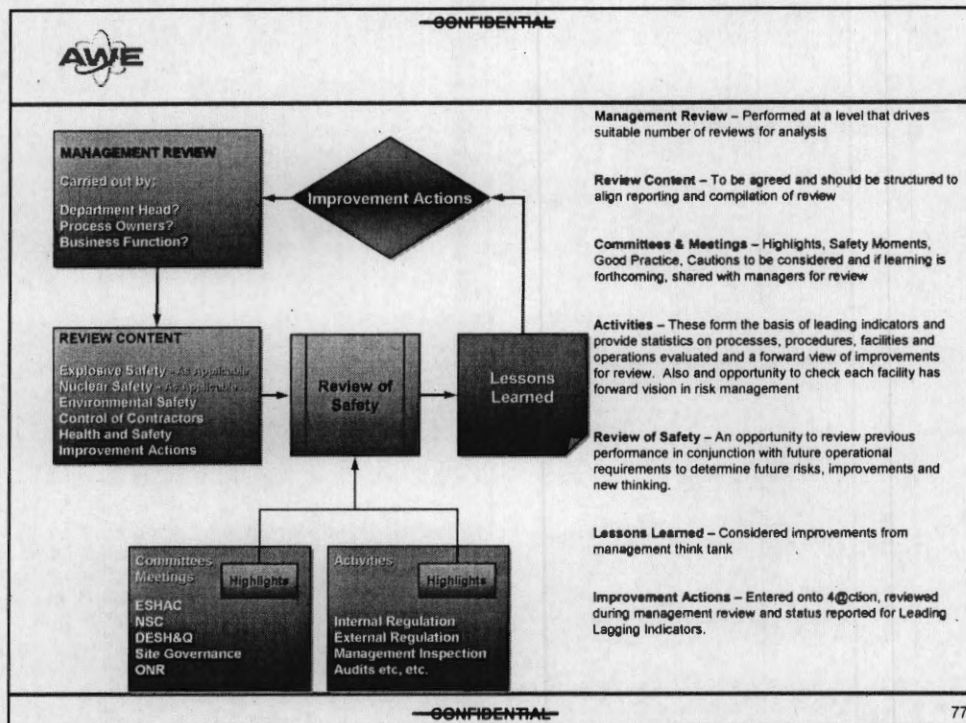
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All


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AWE PRS				
Facility	Existing Nil Decision Date	Start Date	Submission Date	Decision
[REDACTED]				
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14/02/13	04/02/13 1:1M281U		118-043	Yes	11/03/13 Part B attached in A5
15/02/13	12/02/13 1:1QW4Y		118-042	Yes	15/02/13 Part B attached in A5
21/02/13	21/02/13 1:1PTWJQ		118-041	Yes	07/03/13 Part B attached in A5
23/02/13	23/02/13 1:1P3584		118-040	Yes	01/03/13 Part B attached in A5
08/03/13	12/03/13 1:1QGVQD		118-039	Yes	
12/03/13	17/03/13 1:1NW8F6		118-038	Yes	
19/03/13	18/03/13 1:1NYDT4		118-037	Yes	
20/03/13	21/03/13 1:1MWSWJ		118-036	Yes	
18/03/13	20/03/13 1:1L1086		118-035	Yes	
19/03/13	19/03/13 1:1M488		118-034	Yes	
05/04/13	18/03/13 2:161850		118-033	Yes	
05/04/13	05/04/13 1:1M488		118-032	Yes	
22/04/13	28/03/13 1:1M040		118-031	Yes	REC. 4/13
21/04/13	22/03/13 1:1M488		118-030	Yes	
18/04/13	1:10876		118-029	Yes	
08/04/13	08/04/13 1:11M74		118-027	Yes	
27/03/13	04/03/13 1:1M0814		118-027	Yes	
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larger view attached.



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14/02/13	04/03/13	1-1R2BLU	[REDACTED]	[REDACTED]	116-043	yes	[REDACTED]	yes	[REDACTED]	11/03/13. Part B attached to AE
10/02/13	12/02/13	1-1Q5W4Y	Bearing started to overheat causing oil mist to trigger smoke alarm. AWE F&RS and Shift services attended.	[REDACTED]	116-042	yes	[REDACTED]	yes	[REDACTED]	15/02/13. Part B attached to AE
31/01/13	31/01/13	1-1PTMJQ	Activation of a fire alarm due to smoke emanating from ducting above an enclosure containing a fan and motors.	[REDACTED]	116-041	yes	[REDACTED]	yes	[REDACTED]	07/02/13 Part B attached to AE
23/01/13	23/01/13	1-1P2504	A number of legacy uranium oxide samples, have been identified as not being stored in the type of tins specified by the relevant Criticality Clearance Certificate	[REDACTED]	116-040	yes	[REDACTED]	yes	[REDACTED]	01/02/13 Part B attached to AE
08/01/13	10/01/13	1-1OQYQQ	Contamination found following pipework removal.	[REDACTED]	116-039	yes	[REDACTED]	yes	[REDACTED]	
12/12/12	17/12/12	1-1NW0F6	highlighted a possible discrepancy with a non-fissile moderator move	[REDACTED]	116-038	yes	[REDACTED]	yes	[REDACTED]	
18/12/12	18/12/12	1-1NYD74	Contamination found during lino removal	[REDACTED]	116-037	Yes	[REDACTED]	yes	[REDACTED]	
20/11/12	21/11/12	1-1MM8W2	Criticality alarm sounded due to activation of faulty detector head.	[REDACTED]	116-036	Yes	[REDACTED]	yes	[REDACTED]	
19/10/12	23/10/12	1-1L10X6	C&I maintenance were carrying out Purge lock up testing. During the testing the standby fan tripped and the backup fan also tripped resulting in the loss of the Zone 1 Bay 2 Purge fans.	[REDACTED]	116-035	Yes	[REDACTED]	Yes	[REDACTED]	
10/10/12	19/10/12	1-1IN488	Following on from earlier Event, results of initial survey of 25 columns sent to the ONR	[REDACTED]	116-034	Yes	[REDACTED]	Yes	[REDACTED]	
05/10/12	18/10/12	1-1KI0S0	A planned move of [REDACTED] was taking place within the facility swarf sampling lab using a Movement Control Trolley. Due to the incorrect position of the MCT the move was stopped and an abnormal event raised.	[REDACTED]	116-033	Yes	[REDACTED]	Yes	[REDACTED]	
05/10/12	05/10/12	1-1IN488	Staff sent to the evacuation centre - procedural precautionary requirement due to weather conditions. This follows on from engineering assessment after 1-1IN488	[REDACTED]	116-032	Yes	[REDACTED]	Yes	[REDACTED]	
22/08/12	28/08/12	1-1INQ4U	Storage of un-assayed waste in a decommissioning Modular Containment System (MCS).	[REDACTED]	116-031	Yes	[REDACTED]	Yes	[REDACTED]	RICC office
21/08/12	23/08/12	1-1IN488	A45 Buiding Column Corrosion	[REDACTED]	116-030	Yes	[REDACTED]	Yes	[REDACTED]	
16/08/12	tbc	1-1IDEYC	[REDACTED]	[REDACTED]	116-029	Yes	[REDACTED]	Yes	[REDACTED]	
08/08/12	09/08/12	1-1IHT6	During commissioning of FSTF, when discharging a inert gas, a bursting disc operated.	[REDACTED]	116-027	Yes	[REDACTED]	Yes	[REDACTED]	
27/07/12	06/08/12	1-1HGS14	Unknown object found in locked cabinet	[REDACTED]	116-022	Yes	[REDACTED]	Yes	[REDACTED]	

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Annex B

POST – IT CAPTURE SHEET

POST IT NOTE CAPTURE SHEET

ANNEX B

Impact of AWE resource needs impacting on ONR approval periods. Eg Safety Case authors	Annual Review of Safety Timing in Feb/Mar Link in with AWE management review	Importance of accurate and up to date Hold Point Control Plan	IR Improvements required on right first time document submissions	(HID) More regulator response provided in the meeting/session if provided with earlier copy of report	(ONR) AWE's view of compliance missing: LCs ACs Legislation More measurable/quantifiable SS to suggest org for AWE review
Quality of documentation & evidence submission	Reluctance to raise incidence reports Education of AE process and reporting	Early engagement with regulator	IR Credit for risk reduction programmes. Eg capital build and decommissioning. Cultural change to programmes takes time to embed: golden rules good idea	(DNSR) Good session but would benefit from earlier issue of report	
Impact of AWE programme changes on regulator resource availability. Eg Early communications Hold Point Control Plans	Keep engagement open & honest. Show where this is bringing improvements	Permissioning Strategy	IR Good response on incidents Safety Improvement Programme needs to be more effective. Eg criticality programme	(ONR) Site ability to identify issues ONR could learn	(ONR) How does AWE respond to Internal Regulator challenge
Joint opportunities Develop links with Internal Regulator	Be wary of scope creep Facility taking on wider remit	(ONR) How do we keep focussed on key issues Early issue of report	(ONR) Messages aligned as minimal comment from regulator	(EA) AROE very specific Opportunity for reg feedback	Julie Taylor Busy programme Proud of achievements Are we doing the right things JT is customer Build confidence Own reflection Consistent across org (eg Golden Rules)
Clarity & improvement of communication of respective risks & issues ONR to and from AWE	Explore grouping of Cat A modifications in an area to reduce workload	IR Common Goals/Common understanding between AWE and regulators	(ONR) Importance of regulator understanding programme Align AWE/MOD/Regulator to challenges	(ONR) Maintain balanced view Look ahead - how it reflects on overall picture Good to have Internal Regulator present - build relationship	
No surprises Keep Informed	Overall plan of revised submission dates for regulators	IR Regrets accurate Good behaviours of senior management on safety leadership	(ONR) Report/slides to align as much as possible (Given FOI)		(EA) Early engagement Quality of submissions Intelligent Operator

Annex C**CURRENT ACTION LIST**

Action Reference	Action	Owner
CY/14/01	The regulatory community had asked that in future the Annual Safety Report be promulgated in advance of the formal meeting to allow time to review and digest the data.	Head of OEL
CY/14/02	AWE to supply the regulatory community with a consolidated list of major projects submission documents together with the planned submission dates.	