

## 2.2 Conclusions

Defence is currently

- exposed to extreme WHSE risks by poorly maintained facilities, unsafe operating practices and fragmented policies.
- 47C, 47D
- remediating facilities that ought to be closed
- holding fuel reserves that are unnecessary to meet demand or capability needs
- operating outside existing Chiefs of Service Committee (COSC) policy on reserve holdings
- taking independent Group based actions that constrain future Defence flexibility.

To radically improve the DoD Petroleum Fuels Supply Chain and prevent recurrence of the current high risk WHS issues, there are two underlying key issues for DoD to acknowledge and act upon, namely

1. Petroleum Fuels supply chain is a speciality discipline covering procurement, engineering, maintenance, operations focussed on delivering capability to the Services, and
2. The Fuels Supply chain boundaries include the capability of the Australian Oil Industry.

The following recommendations articulate the required integrated end to end supply chain strategic actions to transform the DoD Fuels Supply Chain into a Services Capability focussed activity with enduring facilities, maintenance and operations integrity and competency.

## 2.3 Recommendations

It is recommended to the Secretary of Defence to implement the following actions which are split into two primary categories.

- 'Now Now' action items that are to be immediately implemented DoD wide to correct fundamental failings in the existing DFI systems and procedures. These actions will provide key barriers to reduce both the probability and impact of potentially high risk activities across the fuels supply chain.
- Strategic actions that will provide DoD the foundations of a fit for purpose fuels supply chain.

(Tactical actions are also included in the main body of the report for action by the DFSC)

### 2.3.1 Immediate Action Items

1. Develop and deploy DoD wide DFI Permit to Work process and rollout to all DFI OA/MA/RPP staff and operations and engineering contractors.
2. Develop and deploy a DoD wide DFI Risk Assessment Process and Policy for use at all levels of activity complexity and rollout to all DFI OA/MA/RPP staff and contractors.
3. Implement fast track Rollout Processes that demonstrates and measures the effective and on-going implementation of any new/revised systems and procedures
4. Fast track a central DoD wide engineering response to demonstrate the integrity of all DFI subsurface and above water pipelines, implement remediation and specifically develop a pipeline integrity management system.

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### 2.3.2 Strategic Action Items

**Table 1 Strategic Actions**

Item	Title	Description
1	Establish an individual with a supporting organisation and authority to deliver Integrated Planning and Operational Management of the Defence Fuels Supply Chain	<p>Establish within JLC the single owner with authority and support to lead the fuels supply chain with primary accountability for Delivery In Full On Time. Requires authority for technical and operational control across organisational boundaries to drive change and performance.</p> <p>This organisation (Joint Logistics Command Defence Fuels Supply Chain, DFSC) should be led, at least initially, by a 2 Star or equivalent to give sufficient weight to this key function.</p>
2	Establish immediate authority and responsibility of Head DFSC	Current policies are outdated and do not support good governance and decision making of the entire end to end supply chain. Issue a Secretary's directive empowering Head DFSC with a remit and authority to remediate and operate the supply chain, to rewrite policy and to deliver the outcomes of this Review.
3	Establish governance to ensure timely and active decision making.	A Defence Fuels Management Committee currently exists but with a remit to coordinate and collaborate without an active role in ensuring a Defence delivery. Reconstitute DFMC as an Advisory Group to the Head DFSC.
4	Articulate Roles and Accountabilities	<p>Head DFSC to lead establishment of a services agreement between JLC all participants of the Defence Fuels Supply Chain (DFSC) articulating roles of Customer, Client, End User and Service Provider with clear acknowledged accountabilities and metrics to measure all aspects of supply chain performance.</p> <p>Ideally the services agreement should include funding allocations from Consumer to Supplier to ensure priorities, costs and funding impacts are included in decision making.</p> <p>JFLA (DMO) as the primary procurer of fuel is a core element in the supply chain and therefore must transition in its entirety into the DFSC.</p> <p>Head DFSC is responsible for future planning of the Defence Fuels Supply Chain, fuels enterprise contracting and acquisition strategies, remediation, fuels infrastructure requirements and Fuels DIFOT. Existing Groups and Services will continue to deliver fuel installation operating and maintenance services to Head DFSC unless otherwise agreed.</p>

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Item	Title	Description
5	Urgently transition fuels engineering management from a regional to central model under DFSC.	<p>DSRG does not have the requisite fuels engineering expertise deployed throughout its regional management model. Consequently the right expertise is not available to specify requirements and engage contractors locally or regionally. Fuels systems design and engineering practice should be centralised within a centre of fuels engineering excellence.</p> <p>Oversight of service delivery is less specialised, a more general engineering function, and can continue to be decentralised.</p> <p>Centralisation of the engineering talent into the DFSC team would seem sensible in order to provide a centre of knowledge contributory to the whole of the Fuels Supply Chain. Maintenance contracting by DSRG may still be appropriate, under the current Defence structure, with requirements set by the DFSC.</p>
6	Establish access to competent advice, operator and maintenance skills.	<p>Defence must engage fuels technology specialists when operating within the fuels supply chain domain. Defence has little organic fuels capability and skills and is compounded by contracting large prime contractors with a generalist skill set and therefore does not gain access or input from the niche specialists who can deliver professional fuels advice and do exist in Australia.</p> <p>Establish a specialist panel of fuel supply chain technologists and advisers under DFSC.</p> <p>Ensure contracted maintenance and operator services are delivered by specialist fuels maintainers and operators.</p> <p>Temporarily suspend the fuels elements of the current DSRG BSR retender until the source selection is reviewed (rapidly) to ensure fuel element supplier competence. If the tendered offers are not appropriate then terminate the current process and retender Fuels services separately to ensure oil industry expertise.</p>
7	Adopt appropriate procurement of aviation refuellers through a combined team outside of the formal capability development process.	<p>CDG/DMO process has taken 5 years to reach a stage of preparing a tender for provision of COTS fuel supply trucks onto RAAF bases under JP157. Current vehicles are expensive and difficult to maintain, add to considerably to capability risk. Project is "big bang" with 130+ refuellers scheduled for delivery across a number of years from 2017-19.</p> <p>47C [REDACTED]</p> <p>47C [REDACTED]</p>

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Item	Title	Description
8	Adopt appropriate procurement of fuel with contract general terms and conditions	<p>Defence procurement of fuel is generally comparable with good practices of industry. However the non-amended use of Procurement Contract General Terms and Conditions in tenders has caused Major OilCo's to not bid for some DOD fuels business, resulting in single source of supply and a reduction in competition. This is estimated to have cost Defence 20-30usc/bbl, around \$600-900k pa.</p> <p>DoD to review General Terms &amp; Conditions.</p>
9	Minimise Working Capital in fuel holdings	<p>Defence holds fuel up to s33(a) of usable stock in some locations. This has varied over time and equates to s33(a)(ii) of sunk operating costs that could be recovered by simply reducing fuel holdings by not ordering fuel and drawing down on holdings.</p> <p>47C [REDACTED]</p> <p>Act to minimise fuel holdings by DFSC:</p> <ol style="list-style-type: none"> <li>1. developing for COSC consideration a Defence wide strategic integrated holdings policy having consulted with stakeholders (currently required of the Services but largely built from existing infrastructure).</li> </ol> <p>47C [REDACTED]</p> <ol style="list-style-type: none"> <li>3. Optimising holdings by considering Service RTS demand and the national fuels supply base and delivering through integrated management and the centralised procurement of fuel.</li> <li>4. Controlling fuel quantities held in tanks across the supply chain.</li> <li>5. Setting maximum DoD wide stock target.</li> </ol>
10	Reduce fuel physical losses	<p>Oil companies and terminals are ruthless in their management of losses.</p> <p>The existing Defence oil accounting processes across the supply chain do not measure physical losses by theft or emissions to the environment.</p> <p>Implement cross supply chain oil accounting best practice reconciliation methods to establish losses by system/tank and implement corrective measures to reduce loss.</p>

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Item	Title	Description
11	<p>33(i), 33(ii), [REDACTED]                      47C(1)(a), 47D [REDACTED]</p>	<p>33(i), 33(ii), 47C, 47D [REDACTED]                      [REDACTED]                      [REDACTED]                      [REDACTED]</p> <p>[REDACTED]                      [REDACTED]                      [REDACTED]</p> <p>[REDACTED]                      [REDACTED]                      [REDACTED]</p> <p>[REDACTED]                      [REDACTED]                      [REDACTED]</p> <p>[REDACTED]                      [REDACTED]                      [REDACTED]</p> <p>[REDACTED]                      [REDACTED]                      [REDACTED]</p>
12	<p>Shutdown DFI-M Stokes Hill, DFI-A FF4 RAAF Darwin                      33(i), 33(ii), [REDACTED]                      [REDACTED]</p>	<p>DFI-M Stokes Hill resides in the centre of Darwin and holds 33(i), 33(ii) [REDACTED]. It bears the scars of Japanese bombing during WW2, is aged and deteriorated. It carries elevated risk which given its proximity to the Darwin CBD, residential and tourism precincts should be permanently decommissioned with minimum delay. Shutdown will avoid 47D [REDACTED].</p> <p>The planned Feb 2014 delivery of 33(i) into Stokes Hill should be cancelled and negotiations begin immediately with Industry for 33(i), 33(ii), [REDACTED] in Darwin coupled with min stock targets to fulfil RTS and strategic stock levels.</p> <p>Fuel Farm 4 at RAAF Base Darwin has recently been closed. For similar reasons it should never re-open and be demolished as soon as practicable.</p> <p>33(i), 33(ii), 47C, 47D [REDACTED]                      [REDACTED]                      [REDACTED]                      [REDACTED]</p>

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Item	Title	Description
13	Leverage existing DoD assets where appropriate.	<p>DoD assets are significantly underutilised and present potential opportunity to reduce Defence costs and provide income.</p> <p>s33(a)(ii) [REDACTED]</p> <p>s33(a)(ii) [REDACTED]</p>

## 2.4 Potential Outcomes

In summary, the implementation of actions proposed by this Review will provide:-

- 33(i), 33(ii), 47C, 47D [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- allow a reduction in staffing with ongoing operational efficiency
- an ability to monitor, reduce and be able to manage DoD risk

Implementation of the DFSC will require funding:-

- \$8M to implement in transition to DFSC over 18 months, potentially drawn out of savings in WHS remediation budget of \$150M.
- Ongoing costs should reduce and fit within existing staffing though the DFSC restructure will require differing skills sets but will be dependent on a future organisational review.

Note that DFI demolition and the extent of site underground remediation is an extant liability may have a significant budget impact.