

Guidance for managing operations as part of COVID-19 pandemic response – Valid for 3 months

Background

JIG recognises that the COVID-19 outbreak may affect Members' abilities to carry out their routine operations and maintenance tasks due to reduced traffic & throughput levels as well as staffing reductions caused by illness, self-isolation or for business reasons. This Bulletin seeks to issue guidance for users of JIG standards in managing operations under these conditions but also to prepare for a return to normal service levels when activity begins to recover.

Guidance is provided to operations where there is either limited or zero airfield operations, for:

- Maintaining Operations (even if at reduced level), or
- Decommissioning and Recommissioning of equipment where necessary

Operating sites are advised to follow company guidelines and local legislation, in addition to following recommendations included in this Bulletin. JIG will continue to monitor the situation and update the advice as necessary but at least quarterly. Discussions are underway with other industry bodies to ensure a coordinated approach.

Management of Change (MOC)

Operators who have been impacted by the pandemic, are expected to activate their Business Continuity Plans (BCPs). All operators shall apply their MOC process throughout this period of change to routine operations. By assessing the impact and potential duration of changes, operators can effectively plan for, and effectively communicate changes to mitigate against incidents.

The overriding principle in relation to change actions in response to the pandemic shall be the protection of people. Consideration shall first be given to minimising activity that could result in the spread of the virus. Minimising work that involves direct contact between individuals and adopting approaches to remote working where safe to do so shall be implemented.

Recommendations

Operators shall assess their operational needs and identify if all or part of the equipment or facilities should be temporarily removed from service. A location should identify a minimum level of staffing / competence / compliant equipment / capability to run the operation to JIG standards, even if this is at a reduced state.

When safe fuelling and delivery of on specification fuel can no longer be achieved, airport authorities and airline operators shall be notified.

The principle of action taken should be based on the following priorities:

- **Option 1** - Maintain all equipment in operational mode, where there are no changes in on-site staffing levels, in line with reduced activity to minimise potential risk of virus spread.
- **Option 2** - Where option 1 is not possible, establish a plan to decommission part of the site equipment and facilities that are not needed for the current reduced operation and focus

available resources on maintaining the equipment and facilities necessary for service to the JIG Standards.

- **Option 3** - Where both option 1 and 2 have been ruled out, and it is absolutely necessary to reduce frequency of checks and maintenance due to non-availability of personnel and third party contractors, this shall be done following risk assessment and under an approved variance approval certificate.

GENERAL CONSIDERATIONS FOR OPERATION UNDER PANDEMIC RESPONSE

Immediate or short-term actions are likely to be primarily Quality Control (QC) related, however an important aspect to consider will be communications with staff, suppliers, supplying locations and other stakeholders such as airport authorities. This is particularly important for operators reducing their manned hours in case they have a need to be contacted during the new unmanned period.

The following shall be taken into consideration:

- Maintain sufficient stock in consultation with suppliers and airport authorities.
- Enhanced surveillance during fuel receipts is required, e.g. confirmation that the quality certificate for the incoming batch is less than 180 days old.
- Monthly conductivity monitoring of Jet fuel stocks (minimum emergency level of 25 pS/m in accordance with the Low Conductivity Protocol).
- Periodic Testing for static fuel batches older than 6 months or tanks in which less than half of the product has been replaced during the 6-month period.

Note: (The above 3 areas are under review with the specification authority and updated advice will be issued when available.)

- For hydrant systems, a plan shall be developed with the airport authority to maximise operation of all sections of the hydrant to maintain system health and minimise recommissioning requirements.
- Where possible, all filters shall be operated at least weekly under maximum flow conditions and sampled. Where this is not possible, it may be necessary to isolate and decommission some filters as detailed below.
- Filter elements which have been allowed to dry out or removed from service shall not be reused.
- Consider the impact of thermal expansion on systems which are not ordinarily isolated. For instance, sufficient air/vapour in the top of an isolated pipe section will prevent high pressure developing with increased temperature.
- Periodically operate rotating machinery such as pumps, operate MOVs etc.

Additional considerations

- Security for temporarily unmanned sites that were previously manned.
- Consider sealing/locking valves in closed position.
- Facility/apron entry restrictions.

- Engagement with airport authority to discuss access for critical tasks.
- Communication between ITP and Storage operators where required, e.g. for test rig access where required, or ITP and Hydrant operator regarding usage by ITP during dormant period if need to pressurize dispensers, etc.
- Note: The timing of vehicle testing should be synchronized with hydrant filter checks where the test rig is fed off the main hydrant, so co-ordination between ITPs and the hydrant operator is essential.
- Plans for supplies of perishables (CWD, hoses etc.), assess difficulties with shipments from equipment suppliers, current stock levels and consider ordering spare parts to maintain stocks locally.

TEMPORARY DECOMMISSIONING OF EQUIPMENT AND FACILITIES

Equipment and facilities that are temporarily taken out of service in these circumstances are not required to operate to JIG standards until returned to service. A detailed plan for recommissioning equipment and facilities that have been out of service shall be available/developed, to ensure that all required flushing, sampling, inspection and maintenance activities have been performed before returning to service (see below).

Decommissioned Storage Tanks

- For a storage tank that is temporarily out of service, all operational related checks (e.g. floating suction check, tank vents, high level alarm checks, etc.) may be suspended.
- For locations supplied by non-dedicated means, where the contents of a tank are moved into another one by use of a line containing uncertified product, a MOC shall be conducted to determine the extent of recertification testing required on the receiving tank.

Decommissioned Vehicles and Fuelling equipment (carts and cabinets)

For fuelling vehicles temporarily out of service, the following recommendations are provided to support re-commissioning of equipment in a controlled and safe fashion:

- Vehicles should be circulated (on a test rig or within a fueller) at least weekly to ensure all seals and pipework are wet with fuel.
- Fuelling equipment should be sampled weekly.
- Vehicle filters shall only be sampled when the filter is pressurised, e.g. by connecting a hydrant dispenser to the test rig or by re-circulation.
- After conducting a 360 walkaround check, start and drive vehicles at least weekly for the time required to replace start up charge drawn from batteries. Keep a record of the voltage and intensity of the battery in case of the battery fails and an external start is needed.

Decommissioned Filters

Where filters cannot be operated at least weekly they should be decommissioned. For filters that are approaching their changeout date, consideration should be given to removing the elements and

leaving the vessel empty with appropriate labelling to ensure that the vessel is not put back into service without elements. Isolation of filter vessels shall follow LOTO procedures, as required by the site work control and HSSE procedures.

Filter monitor elements shall never be allowed to dry out, even partially. If a filter monitor vessel is to be removed from service altogether, elements shall be removed.

RECOMMISSIONING OF EQUIPMENT AND FACILITIES

Return of equipment and facilities shall follow industry standards and guidance in this bulletin. MOC procedures shall be followed and a plan shall be in place for all necessary checks to be carried out prior to system or vehicle re-instatement. Ensure that maintenance staff or contractors are readily available to support any emerging issues as part of equipment/facility recommissioning.

Storage Tanks

As part of tank recommissioning procedures, empty tanks shall be inspected from outside through a suitable manhole to assess cleanliness. The tank shall then be filled at the level required to cover the suction height to allow for circulation through the piping system. A sump sample shall then be taken for an MBG test. If results of these checks are satisfactory, the tank can be re-commissioned otherwise the tank should be inspected and cleaned internally before re-commissioning.

Vehicles and Fuelling equipment (carts and cabinets)

In accordance with existing JIG standards (JIG1 4.1, JIG4 8.10), fuelling equipment out of service for over one month shall be:

- Thoroughly checked, flushed, including sampling lines, and tested to ensure that it is in proper operating condition before being used. Delivery hoses shall be flushed with at least twice the hose content and flushed product shall be disposed of.
- All relevant routine checks (daily, weekly, monthly and quarterly) shall be performed including colorimetric filter membrane tests, monthly hose inspection and hose-end strainer checks, pressure control and deadman testing, interlock performance tests and bonding wire continuity.
- Where fuelling equipment has been out of service for more than six months, meter proving shall be conducted prior to return to service.

Filters

Inspect and clean inside of vessel, replace lid gasket/seal if required and install new filter elements per manufacturers recommendation. Elements that have been removed from service shall not be reused. Recommissioning of the vessel shall be with new elements. **Extended changeout intervals beyond the existing requirements are not permitted.**

USE OF EQUIPMENT AT REDUCED LEVEL/FREQUENCY

For equipment that remains operational at reduced level or reduced frequency, and where decommissioning is not an option, the frequency of some routine tasks may be considered for

relaxation, provided there are no fundamental issues or failures and always based on a risk-based MOC plan and approved variance. The Variance shall be reviewed monthly during this period.

The circumstances for reduced frequency shall only be based on non-availability of key maintenance personnel or third-party contractors due either to travel restrictions, necessary self-isolation or perceived high risk of infection if on site.

For equipment in less frequent (than normal) use, the following examples may need to be considered for relaxation, under mitigation as part of an approved variance:

- Daily equipment condition checks (bonding cables, etc.) may be performed less frequently but at least weekly and before use.
- Sump flushing of tanks and filters may be done less than daily but shall be done at least weekly and before use, after heavy rainfalls and vehicle washing.
- Always keep the filter vessel filled with fuel during periods of inactivity.
- Operate the filter at least weekly by circulation where possible, at the highest possible flow rate. For vehicles this may be done on a test rig or by recirculation for fuellers.
- Ensure that a filter is not drained as a result of sampling.
- Weekly equipment checks may be performed less frequently but at least monthly and before use.
- Monthly maintenance checks may be delayed by up to 2 weeks.
- Quarterly or less frequent checks that are due for completion before June 2020, may be delayed by up to 1 month. This excludes filter changes that shall never be delayed beyond the maximum allowable change-out time.

Where changes in established frequencies of routine operating and maintenance tasks, such as the above, have to be introduced as part of pandemic response plans, these shall be agreed locally and supported by the company management under approved variance. All operations introducing reduced frequency of equipment as part of pandemic response shall still follow all other mandatory requirements in JIG Standards not covered by approved variance.

HYDRANT SYSTEMS

Hydrant systems are complex and unique in their design and operation so general guidance is difficult to provide. Any reduction in frequency of checks, decommissioning of whole or part sections and isolations of hydrants shall undergo a MOC process, using a risk-based approach.

It may be necessary to shut down parts of the aviation fuel hydrant system. Shutdowns may be long term or partial (occasional fuelling required). During the shutdown, the hydrant operator may be able to work normally or may be resource constrained and need to prioritise work.

Key considerations

- If the fuel is left to settle in the hydrant during shutdown then, depending on the length of the

shutdown, significant recommissioning will be required at subsequent start up. The notice required for start-up depends on the duration of the shutdown; more checks are required the longer the shutdown, so more notice is required from the airport.

- Unused sections of the hydrant should be maintained at normal pressure and monitored to ensure integrity (holds pressure) and that there is no water ingress into hydrant from flanges and similar.
- Where critical to hydrant integrity monitoring, DBB valve cavities shall be flushed
- Unused sections of the hydrant should be flushed back to storage at least monthly, where possible.
- All low points shall be flushed weekly. On unused sections this may be extended to monthly
- Weekly hydrant pit cleaning may be suspended however in the event of heavy rainfall cleaning shall take place to keep the liquid level below the pit box base flange.
- Hydrant pits and pit valves shall be inspected monthly to check for leaks and liquid levels.
- Hydrant pit valve annual dynamic tests may be suspended but shall be done as part of recommissioning if out of date.
- The periodic system checks of the following systems shall be maintained:
 - Valve chambers
 - Emergency shut-down systems
 - Cathodic Protection (CP). Note: If the annual CP system check is due in the next 3 months, it may have to be delayed depending on the availability of the qualified technician
 - Hydrant integrity and pressure testing

Recommissioning

A recommissioning plan shall be generated for hydrant sections that have been shut down. The extent of hydrant recommissioning will depend on the length of shutdown and what maintenance was carried out during the shutdown. If a hydrant pit has remained unused for more than three months, irrespective of configuration, flushing shall be carried out before use.

The EI 1560 commissioning guidance should be reviewed to see what is appropriate.

Inspections and maintenance performed by third parties

Any inspections or maintenance works performed by third parties within this period shall take the recommendations provided in this bulletin into consideration.

Actions to Implement this Bulletin (See Table 1 for Action Type Codes)

Action Description	Action Type	Target Completion Date
Entities operating in accordance with JIG standards may follow the recommendations provided in this Bulletin as part of their own pandemic response plans	RP	30 June 2020

Table 1 Action Type Codes

Action Types	JIG Bulletin Action Type Definition
JS	Change to JIG Standard – to be adopted by JV and/or Operator to continue to meet the JIG Standard(s) (JIG 1, 2, 4, EI/JIG 1530 and the JIG HSSE Management System).
RA	Required Action to implement one off verification or checks outlined in the table of actions.
RP	JIG Recommended Practice which the JV should consider adopting as its own practice (**).
I	Issued for information purposes only.

Note (**) - If the JV agreements require any of the JIG Standards and/or any of the JIG Common Processes as the governing operational standard then adoption of changes to applicable JIG Standards and/or Common Processes should not be considered optional by the JV Board.

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