



***Jones Engineering Group***

***EHS-SOP 11***

***Site Shut-Down & Start-Up Procedure***

## **Introduction**

### **1.0 Objective**

The objective is to ensure responsible leadership and safety during the shutdown and start up phases.

### **2.0 Scope**

This site Shut-down and Start-up procedure applies to all Jones Engineering Group work sites and describes the actions to be taken in the event of a shutdown.

### **3.0 Shut-Down Procedure**

#### **3.1 Permits**

- All permits are to be returned to the issuer and signed off.

#### **3.2 Electrical Equipment**

- All extension leads to be removed from service and stored in site boxes.
- All tools to be stored in the site boxes.
- All equipment is to be stored in the Stores.

#### **3.3 Site Boxes**

- All site boxes are to be brought to the Compound Storage Area and locked away in the Stores.

#### **3.4 Scaffolds, Platforms & Ladders**

- Mobile towers are to be dismantled and returned to the Stores.
- All other scaffolds are to have the Scafftag and the access ladders removed.
- All work access platforms, temporary and mobile, are to be removed from all buildings and returned to the Stores.
- All ladders are to be removed from all work areas and stored in the designated storage areas.

### 3.5 Fall Arrest

- All Fall Arrest Equipment is to be removed from work areas and returned to the Stores for inspection.

### 3.6 Gas Cylinders

- All oxy-acetylene, argon, helium, OFA, or any other type of gas cylinders are to be removed from all buildings and stored externally in the designated contractors compound storage area, secured in an upright position in racks and where possible locked up to prevent unauthorized use.

### 3.7 Solvents & Adhesives

- All adhesives and solvents are to be removed from the work areas and returned to the Stores.
- All chemicals stored in company Chemical Storage cabinets inside the buildings are to be removed and brought back to the Stores.

### 3.8 MEWPs / Forklifts & Cranes

- All company owned MEWPs are to be parked in a Workshop or a designated area keys removed and not left on charge.
- All forklifts/telehandlers are to be parked up at designated areas, locked up and the keys removed and placed in Site Office.
- All crane jibs should be made safe to prevent overturning in high winds.
- All MEWPs/forklifts/cranes should be secured to prevent unauthorised use or vandalism.
- **Hired plant and equipment should be off-hired for the holiday period.**

### 3.9 Offices / Stores / Dry Rooms & Canteens

- All bins are to be emptied and placed inside a Workshop, storage container or designated area.
- All excess clothing is to be removed from the Drying Rooms by close of business on Monday, anything remaining is to be regarded as not wanted and skipped.  
No clothes are to be left on top of or close to any heater or radiator.
- All canteens are to be cleaned and all windows and doors locked.
- Computer hard drives are to be saved to a back-up file and copied to a disc or CD.
- All VDUs and printers are to be switched off and disconnected.
- All windows and doors (internal & external) are to be closed and locked.

- **All lights are to be switched off and all heaters are to be turned to the lowest setting.**
- Temporary water supplies to canteens & toilet blocks are to be turned off and drained.

### **3.10 Checklist**

- The Checklist in appendix 2 is to be completed and returned to the Site Supervisor or Contract Manager before leaving the site at Close of Business.

## **4.0 Start-Up Procedure**

### **4.1 Stand Down**

- All work crews, including Supervisors will attend a Stand down Toolbox Talk prior to commencing work.
- New SPAs /PTPs will be drafted by all work crews and signed by the Supervisor

### **4.2 Plant & Equipment**

- All ladders are to be inspected before use; straight ladders are to be re-fitted to scaffolds.
- All scaffolds are to be inspected by a “competent person” and have a Scafftag fitted.
- GA2 and GA3 Forms are to be completed for MEWPs, ladders & scaffolds before any use.
- All fall arrest equipment should be inspected and the results recorded on the relevant GA3 form before being put into use.
- In case of flat batteries the following Jump Start Procedure is to be utilized. (Appendix1)

### **4.3 Offices / Stores / Drying Rooms & Canteens**

- All locks are to be removed from external doors and all internal doors unlocked.
- Computer hard drives are to be re-installed in each office and reconnected.
- Tools and equipment is to be removed from the Storage Area and located at work areas.
- Water supplies are to be turned back on and checks performed for any leaks.

## **5.0 Document Control Process**

- 5.1 Development of all procedures and policies for EHS must have the consent of the EHS Manager in order to control revisions and issue of the most current versions. An Amendment History is to be included at the end of any document relating the current revision number and the reasons for any alterations.
- 5.2 All policies and procedures must be approved by the General Manager or Managing Director prior to downloading and printing. Electronic versions are to be considered as the current and most up to date version; printed copies are regarded as uncontrolled.
- 5.3 All documents relating to EHSMS policies or procedures are deemed to the property of the EHS Manager and as such, come under the control of that person.
- 5.4 Upon completion of a project, all documentation must be archived in line with the QA procedure and sent to the central archive storage facility. All documentation must be retained for a period of at least seven years.

## **6.0 Changes**

- 6.1 Any changes to this procedure cannot be effected without the permission of the Group EHS Manager.
- 6.2 Any procedural change must be effectively communicated to all Managers by the EHS Manager.

## **7.0 Appendices**

- Appendix 1 – Site Shutdown Readiness Checklist
- Appendix 2 – Site Conditional Record
- Appendix 3 – Shut Down Checklist
- Appendix 4 – Start Up Procedures
- Appendix 5 – Battery Jump Start Procedure

### **References:**

Company Safety Statement

The Safety, Health & Welfare at Work Act 2005

The Safety, Health and Welfare at Work (Construction) Regulations 2013 to 2020

The Safety, Health & Welfare at Work (General Application) Regulations 2007 to 2020

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**Appendix**  
**Appendix 1 – Site Shutdown Readiness Checklist**

No.	Item	N/A	Yes	No
1.	Is the Perimeter Fence Secure?			
2.	Is all plant and machinery parked in a safe location?			
3.	Have all crane jibs been made safe?			
4.	Are all vehicles chocked?			
5.	Are all keys removed from plant and machinery & returned to the Main Office?			
6.	Are all buildings secured – windows closed and doors locked? Canteen <input type="checkbox"/> Drying Rooms <input type="checkbox"/> Offices <input type="checkbox"/> Stores <input type="checkbox"/>			
7.	Are all power supplies to buildings shutdown? Canteen <input type="checkbox"/> Drying Rooms <input type="checkbox"/> Offices <input type="checkbox"/> Stores <input type="checkbox"/>			
8.	Are all electrical equipment, heaters, etc. unplugged? Canteen <input type="checkbox"/> Drying Rooms <input type="checkbox"/> Offices <input type="checkbox"/> Stores <input type="checkbox"/>			
9.	Have water supplies been drained down? Toilets <input type="checkbox"/> Canteens <input type="checkbox"/>			
10.	Are all electrical leads removed from site and returned to stores?			
11.	Are all tools and equipment removed from site and returned to stores area?			
12.	Are all chemicals stored in correct cabinets and in a secure location?			
13.	Are all gas cylinders stored securely in correct racks/cages and returned to external storage/ compound?			
14.	Are all scaff-tags & ladders removed from scaffolds and access platforms?			
15.	Has access to Scaffolds been physically blocked off?			
16.	Are all materials removed from rooftop/high areas?			
17.	Are all rubbish skips/bins/Wheelie bins empty?			
18.	Are all manholes/floor/roof opes securely covered/filled?			
19.	Are all excavations secured?			
No.	Item	N/A	Yes	No
20.	Are all materials in lay down areas secured or removed?			
21.	Are all materials in external storage areas secured or removed.			
22.	Are all emergency access routes clear and checked.			
23.	Are all MEWPS off-hire or stored out of the way?			
24.	Are MEWP battery chargers disconnected from power supply?			
25.	Are all gates/doors locked and the keys secured?			
26.	Is there a plan in place to recertify scaffolds/ladders/safety harnesses etc. before use on first day of work?			
27.	Does Security have contact names and numbers for responsible persons?			
28.	Obtain written confirmation of security arrangements from the GC			

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29.	Confirm with GC no access permitted to JEG personnel, subcontractors or suppliers without the written approval of the JEG responsible persons			
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**Checklist Compiled By:** \_\_\_\_\_ **Company:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Checklist Reviewed By:** \_\_\_\_\_ **Company:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Checklist Accepted By:** \_\_\_\_\_ **Company:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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## Appendix 2 – Site Conditional Record

The intent is to record actual progress made to date and ensure installation is left in a safe and maintained state in preparation for recommencement of works. Accuracy of these records is imperative in order to reduce any risk or exposure and to validate our commercial and contractual position.

No.	Area	N/A	Yes	No
<b>A. SITE CONDITIONAL RECORD PROCEDURES</b>				
<b>A1.0</b>	<b>Installation</b>			
A1.1	Take a full suite of <b>photos</b> of your installation including associated plant and equipment progress weekly, and more frequently or immediately prior to a confirmed closure date			
A1.2	Update drawings to reflect as-built conditions, including GA's, Schematics, and Isometrics as applicable			
A1.3	Cap, seal, coil all open, exposed services and protection to equipment			
<b>A2.0</b>	<b>Material Inventory</b>			
A2.1	Undertake a stock take of all materials yet to be installed including pre-fabricated material in both on-site storage and local to the works. <b>Photographic record required</b>			
A2.2	Complete same exercise for off-site fabrication facilities including all sub-contracted works, giving consideration to materials that maybe in transit. <b>Photographic record required</b>			
A2.3	Update procurement schedule to reflect status of orders, including order & delivery date, and associated quantities			
<b>A3.0</b>	<b>Plant &amp; Equipment Inventory</b>			
A3.1	Undertake a stock take of all Plant, Equipment, specialist tools, job boxes and BIM stations while indicating if item is hired or company owned. <b>Photographic record required</b>			
<b>A4.0</b>	<b>OFCI Plant</b>			
A4.1	Take a full set of photos of all OFCI regardless of installation status, ensuring that it is protected appropriately, together with schedule			

**Note: Photos should be downloaded same day and saved on the project folder clearly identifying the date, area, system or geographical location i.e. Admin. Building, Colo. 1, etc. under the above headings.**



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### Appendix 3 – Shut Down Checklist

No.	Area	N/A	YES	NO
<b>B. TEMPORARY SHUT-DOWN PROCEDURES</b>				
<b>B1.0</b>	<b>Permits</b>			
B1.1	All permits are to be returned to the issuer and signed off			
<b>B2.0</b>	<b>Electrical Equipment</b>			
B2.1	All extension leads to be removed from service and stored in site boxes			
B2.2	All tools to be stored in the site boxes			
B2.3	All equipment returned to Stores			
<b>B3.0</b>	<b>Site Boxes</b>			
B3.1	All site boxes are to be brought to the Compound Storage Area and locked away in the Stores			
<b>B4.0</b>	<b>Scaffolds, Platforms &amp; Ladders</b>			
B4.1	Mobile towers are to be dismantled and returned to the Stores			
B4.2	All other scaffolds are to have the Scafftag and the access ladders removed			
B4.3	All work access platforms, temporary and mobile, are to be removed from all buildings and returned to the Stores			
B4.4	All ladders are to be removed from all work areas and stored in the designated storage areas			
<b>B5.0</b>	<b>Fall Arrest Equipment</b>			
B5.1	All Fall Arrest Equipment is to be removed from work areas and returned to the Stores for inspection			
<b>B6.0</b>	<b>Gas Cylinders</b>			
B6.1	All oxy-acetylene, argon, helium, OFA, or any other type of gas cylinders are to be removed from all buildings and <b>stored externally</b> in the designated contractors compound storage area, secured in an upright position in racks and where possible locked up to prevent unauthorised use			

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No.	Area	N/A	YES	NO
<b>B7.0</b>	<b>Solvents &amp; Adhesives</b>			
B7.1	All adhesives and solvents are to be removed from the work areas and returned to the Stores			
B7.2	All chemicals stored in company Chemical Storage cabinets inside the buildings are to be removed and brought back to the Stores			
<b>B8.0</b>	<b>MEWPs / Forklifts &amp; Cranes</b>			
B8.1	All company owned MEWPs are to be parked in a Workshop or a designated area keys removed and not left on charge			
B8.2	All forklifts/telehandlers are to be parked up at designated areas, locked up and the keys removed and placed in Site Office			
B8.3	All crane jibs should be made safe to prevent overturning in high winds			
B8.4	All MEWPs/forklifts/cranes should be secured to prevent unauthorised use or vandalism			
B8.5	Hired plant and equipment should be off-hired			
<b>B9.0</b>	<b>Offices and Stores, Drying Rooms &amp; Canteens</b>			
B9.1	All bins are to be emptied and placed inside a Workshop, storage container or designated area			
B9.2	All excess clothing is to be removed from the Drying Room anything remaining is to be regarded as not wanted and skipped. No clothes are to be left on top of or close to any heater or radiator etc			
B9.3	All canteens are to be cleaned and all windows and doors locked			
B9.4	Computer hard drives are to be saved to a backup file and copied to a disc or CD			
B9.5	All VDUs and printers are to be switched off and disconnected			
B9.6	All windows and doors (internal & external) are to be closed and locked			
B9.7	All lights and heaters are to be switched off			
B9.8	Temporary water supplies to canteens & toilet blocks are to be turned off and drained			
B9.9	Hired storage containers, office and welfare units should be off-hired			
<b>No.</b>	<b>Area</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>
<b>B10.0</b>	<b>Temporary Shutdown &amp; Readiness Checklist</b>			
B10.1	The Checklist in Appendix 2 is to be completed and returned to the Site Supervisor or Contract Manager before leaving the site at Close of Business			
<b>No.</b>	<b>Personnel Requirements</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>
<b>B11.0</b>	<b>Flights</b>			
B11.1	Booking of flights for all JEG personnel			
B11.2	Include checked bags if required			
<b>B12.0</b>	<b>Belongings</b>			
B12.1	Personnel to remove all belongings from office e.g. Laptops, chargers, mice, valuables, cards, badges			

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B12.2	Remove all belongings from accommodation where possible for checking in to flight			
<b>B13.0</b>	<b>Car Hire</b>			
B13.1	Confirm car return requirements with hire company in advance, preferably to the airport			
B13.2	Return cars prior to departure			
B13.3	Schedule out cars on hire and maintain record of any additional costs			
<b>B14.0</b>	<b>Accommodation</b>			
B14.1	Clean and Tidy accommodation where possible in the event of an extended absence			
B14.2	Arrange a location to leave accommodation keys and cards for collection by the provider			
B14.3	Return accommodation to provider (Senior Management confirmation required) and record any additional costs for potentially breaking leases			
<b>B15.0</b>	<b>Security of IP</b>			
B15.1	Shred or destroy hard copy documents not required for project re-start			
B15.2	Transfer and secure any site servers or remaining hard copy documents to a lockable location e.g. container			
<b>B16.0</b>	<b>Subcontractors</b>			
B16.1	Ensure subcontractor workforce have arranged flights, accommodation and car hire arrangements in line with JEG arrangements			

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#### Appendix 4 – Start Up Procedures

C. START-UP PROCEDURES				
C1.0	Stand-down	N/A	Yes	No
C1.1	All work crews, including supervisors will attend a stand-down toolbox talk prior to commencing works/2m social distancing stand points available			
C1.2	New SPA's/PTP's drafted by all work crews on the new forms and signed by the supervisors			
C1.3	Revised RAMS briefed to crews and signed			
C1.4	All activities within 2m social distancing identified on RAMS			
C1.5	Location for whiteboard meetings identified and suitable to allow for social distancing			
C1.6	New site rules issued by PSCS including social distancing and hygiene			
C1.7	CIF SOP for C-19 pandemic available			
C1.8	C-19/JEG Questionnaire completed by all staff			
C1.9	C-19 Compliance Officer appointed and identified on posters & to all staff			
C2.0	Plant & Equipment			
C2.1	All ladders inspected before use			
C2.2	All scaffolds inspected by CSCS trained person and have new scafftag fitted			
C2.3	GA2 / GA3 form complete for MEWPs, ladders & scaffolds prior to use			
C2.4	All fall arrest equipment inspected & results recorded on GA3 form prior to use			
C2.5	In case of flat batteries, jump start procedure to be utilised as per Appendix 1			
C2.6	Stocks of PPE available including C-19 specific PPE			
C2.7	Hand sanitizers available at entry/exit points, prominent locations			
C2.8	All plant and equipment cleaned and disinfected prior to use			
C2.9	C-19 Information posters erected in prominent locations			
C2.10	Floor markings in place to assist with social distancing rules			
C2.11	One way systems onsite - in place and sign posted			
C2.12	Clean down station available at delivery point(s)			
C3.0	Offices, Stores, Canteens & Drying Rooms			
C3.1	All locks are to be removed from external doors & all internal doors unlocked			
C3.2	Computers/Laptops/Servers etc... booted up ok			
C3.3	Tools & equipment taken from storage areas to work areas			
C3.4	Water supplies turned back on and checked for leaks			
C3.5	Disinfectant/sterile wipes available for cleaning down regularly used surfaces			
C3.6	Covid-19 Posters erected in offices			
C3.7	All seating in offices/canteen/drying rooms are at least 2m apart to allow for social distancing			
C3.8	Hand sanitizers available in all welfare facilities			
C3.9	Washbasins 2m apart to allow for social distancing			
		N/A	Yes	No

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C3.10	Welfare facilities comply with new C-19 hygiene practices (knee operated sinks/motion sensor sinks/hand dryers/soap dispensers etc....)			
C3.11	Cleaning Rotas in place for all welfare facilities			
C4.0	First Aid Response			
C4.1	First Aid Responders to meet to discuss protection when administering first aid			
C4.2	First Aid boxes to be reviewed and additional stock ordered			

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## Appendix 5 – Battery Jump Start Procedure

### **Battery Jump Start Procedure**

- Always ensure that both batteries have the same voltage rating.
- If starting using a battery on another vehicle, check the earth polarity on both vehicles.
- Ensure that the vehicles are not touching.
- Turn off the ignition of both vehicles.
- Always use purpose made, colour coded jump leads **with insulated handles**, RED for the positive cable, BLACK for the negative cable.

#### **CONNECTION (for vehicles with SAME earth polarity)**

- First connect the non-earthed terminal of the good battery to the non-earthed terminal of the flat battery.
- Connect one end of the second lead to the earthed terminal of the good battery.
- Connect the other end of the second lead to a suitable, substantial, unpainted point on the chassis or engine of the other vehicle, away from the battery, carburettor, fuel lines or brake pipes.

#### **CONNECTION (for vehicles with DIFFERENT earth polarity)**

In view of the potential for confusion this should only be attempted by skilled and experienced personnel.

- First connect the earthed terminal of the good battery to the non-earthed terminal of the flat battery.
- Connect one end of the second lead to the non-earthed terminal of the good battery.
- Connect the other end of the second lead to a suitable, substantial, unpainted point on the chassis or engine of the other vehicle, away from the battery, carburettor, fuel lines or brake pipes.

### **STARTING**

- Ensure that the leads are well clear of moving parts.
- Ensure that all persons are well clear of both engines so as not to be in the line of fire should either battery explode. Always wear full PPE (Safety glasses, Hard Hat, etc.)!
- Start the engine of the “good” vehicle and allow to run for about a minute.
- Start the engine of the “dead” vehicle and allow to run for about a minute.

### **REMOVAL OF CABLES**

- Stop the engine of the vehicle.
- Disconnect the leads in the reverse order to which they were connected.
- Take great care in handling jump leads; do not allow the exposed metal parts to touch each other or the vehicle body

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**Amendment History**

Date	Amend Ref/ Issue No	Reason	Auth. by
11.12.07	Rev 1	First Issue (Intel)	D. O'Brien
14.12.07	Rev 2	Issue to Schwarz (SDT)	D. O'Brien
19.12.07	Rev 3	Major alterations to adjust for all sites & inclusion of Toolbox Talk	D. O'Brien
18.8.08	Rev 4	Substitution of "holiday" for "Christmas"	D. O'Brien
12.12.08	Rev 5	Additions to sections 4 & 7 Additions to Holiday Shutdown Readiness Checklist	D. O'Brien
9.12.09	Rev 6	Alterations to Sections, Checklist & Toolbox Talk	D. O'Brien
22.12.10	Rev 7	Alteration of Toolbox Talk format and additions to text Change to JEG format.	D. O'Brien
14.3.11	Rev 8	Amendment to Section 4.1	D. O'Brien
18.12.13	Rev 9	Alteration to title: amendment to Checklist & deletion of Standown Toolbox Talk	D. O'Brien
17.12.14	Rev10	Additions to Holiday Shutdown Readiness Checklist	D. O'Brien
19.12.16	Rev 11	Addition of Hired Plant & Equipment to Section 8 and alteration to Section 9.7	D. O'Brien
24.03.20	Rev 12	Substitution of "holiday" to "site". Format Change to Site Shutdown Readiness Checklist Addition of Site Conditional Record Procedures	D. Grady
05.11.2020	Rev 13	New SOP Layout	D. Grady
10.12.2020	Rev 14	Alter following legislation in References:	D. Grady

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		<ul style="list-style-type: none"> <li>• Construction Regulations SI 291 of 2013 to “The Safety, Health and Welfare at Work (Construction) Regulations 2013 to 2020.”</li> <li>• General Applications Regulations SI 299 of 2007 to “The Safety, Health &amp; Welfare at Work (General Application) Regulations 2007 to 2020.”</li> </ul>	
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