



5 FUNDAMENTALS OF A PERFECT HSE DAY

JORDAN BUSS - BAKER HUGHES, a GE COMPANY

Focus...

SLIPS, TRIPS, AND FALLS

CHEMICAL HANDLING

HAND SAFETY

ROTATING EQUIPMENT

The 5 Fundamentals

HOT WORK

CONFINED SPACE ENTRY

LINE OF FIRE

JOURNEY MANAGEMENT

LIFTING AND RIGGING

HIGH PRESSURE ACTIVITIES

The 5 Fundamentals – What are they?

1. Hazard Identification

What hazards might be faced while performing this task?

2. Hazard Control

Are controls and barriers in place to avoid an incident?

3. Understand and Follow the Process

Are personnel competent for the task, and are the processes and procedures available and adequate to perform the work safely?

4. Manage Change

Have there been any changes in job requirements or conditions that may increase or change the risks?

5. Share Lessons Learned

Are there any previous lessons learned that should be applied while performing this task? Are there any new learnings that should be shared locally or across the organization?

START

- 1 Identify Hazards
- 2 Control Hazards & Verify Barriers

Stop Work

If any of the 5 Fundamentals cannot be satisfied or are unclear

Why the 5 Fundamentals?

- Incident data showed the 5 Fundamentals to be part of **all** our preventable incidents
- Ensuring that the 5 Fundamentals are truly embedded and executed in the organization will help us make every day a **Perfect HSE Day**

“The vision is to pre-plan and to start every job through the lens of the five fundamentals. Execute, finish the job, and feed the learnings back into the system.” - Jack Hinton, Chief HSE Officer, BHGE



How to Use the 5 Fundamentals

- Leaders **set the example, and the expectation**, for employees to use the 5 Fundamentals in everything we do
- The 5 Fundamentals should be incorporated into any job or task planning conversation, knowing that if we get the 5 Fundamentals right we can **stop or mitigate any preventable incident**
- This is NOT a procedure, it is a mindset –

a way of thinking




Building Around the 5 Fundamentals

Safe to Perform

- Structure the pre-job risk assessment around the 5 Fundamentals
- Assess hazards and ensure controls are in place before proceeding
- Prompt workers to specifically address high risk activities
- Require authorization that the 5 Fundamentals have been addressed

before starting work





Safe to Perform (STP)

Complete prior to starting work and attach to completed job paperwork.


Name of Person Completing Form:	Date:	Time:	Location/ Job No.:
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Job Task Description:

NOTE: Below is a list of questions that help employees identify common job hazards. Review these questions to ensure all unknown hazards have been identified and controlled. Conditions marked as a "YES" must be documented on the back of this form, along with identified controls / barriers to prevent the risk of personal injury or environmental impact. To review a list of identified hazards and established controls refer to the appli Operational Risk Assessment (ORA).

	Yes	NO	N/A		Yes	NO	N/A
1.0 WORK ENVIRONMENT				5.0 TOOLS AND EQUIPMENT (SAFETY)			
1.1 IS HOUSEKEEPING A SAFETY CONCERN?				5.1 HAVE HAND TOOLS BEEN DAMAGED OR MODIFIED?			
1.2 ARE THERE HAZARDOUS WALKING WORKING SURFACES (SLIPS, TRIPS, AND FALL HAZARDS)?				5.2 ARE ANY EQUIPMENT GUARDS MISSING OR DAMAGED?			
1.3 ARE THERE CLIMBING AND ELEVATED WORK HAZARDS (WORKING AT HEIGHTS)?				5.3 WILL ANY PERSONNEL BE WORKING NEAR HEAVY EQUIPMENT USED IN A NEARBY OPERATION?			
1.4 WILL PERSONNEL BE WORKING IN A LINE OF FIRE?				5.4 DOES THE LITHIUM BATTERY SAFETY KIT HAVE ANY DAMAGED OR MISSING EQUIPMENT?			
1.5 ARE THERE ANY UNCONTROLLED HAND PINCH POINT CONCERNS?				5.5 ARE THERE ANY UNCONTROLLED PRESSURE TESTING HAZARDS (LINES, EQUIPMENT FUNCTION TESTING)?			
1.6 WILL AN EMPLOYEE ENTER A CONFINED SPACE?				5.6 OTHER: _____			
1.7 IS ADDITIONAL LIGHTING NEEDED TO SAFELY PERFORM THE JOB?				6.0 PPE (PERSONAL PROTECTIVE EQUIPMENT)			
1.8 ANY FIRE, EXPLOSION/DANGEROUS ATMOSPHERES (H2S, CO2, ETC.)?				6.1 IS ADDITIONAL FACE PROTECTION REQUIRED?			
1.9 ARE THERE ANY ENERGY SOURCES REQUIRING ISOLATION (LOCK OUT -TAG OUT)?				6.2 WILL LOOSE CLOTHING OR JEWELRY CREATE A CATCH HAZARD?			
1.10 ARE THERE ANY ENVIRONMENTAL CONCERNS (WEATHER, WIND SPEED, TEMPERATURE, ETC.)?				6.3 IS PPE DAMAGED? (TORN, CRACKED, ETC.)			
1.11 ARE THERE ANY WORK PERMITS OR LIFT PLANS THAT HAVE NOT BEEN ISSUED OR HAVE EXPIRED?				6.4 IS PPE REQUIRED FOR CRYSTALLINE SILICA?			
1.12 ARE THERE ANY SIMULTANEOUS OPERATIONS (SIMOPS) THAT COULD AFFECT THE JOB?				6.5 OTHER: _____			
1.13 OTHER: _____				7.0 VEHICLES (IF APPLICABLE)			
2.0 UPSTREAM PROCESS SAFETY (UPS)				7.1 ARE THERE ANY FATIGUE CONCERNS WHILE DRIVING, NOT COVERED IN JOURNEY MANAGEMENT PLAN?			
2.1 ARE THERE LESS THAN 2 PHYSICAL BARRIERS IN PLACE?				7.2 HAS THE VEHICLE SUSTAINED ANY DAMAGE THAT WOULD MAKE IT UNSAFE TO DRIVE?			
2.2 PRIOR TO STARTING THE JOB, WAS ANY LEAKING WELL EQUIPMENT IDENTIFIED?				7.3 HAVE THERE BEEN ANY SIGNIFICANT WEATHER CHANGES THAT COULD AFFECT DRIVING?			
2.3 IS THERE ANY PRESSURE CONTROL EQUIPMENT (PCE) NOT CERTIFIED OR TESTED OR COMPATIBILITY CONCERNS WITH WELLHEAD CONNECTION?				7.4 ARE THERE ANY PARKING OR EXITING HAZARDS?			
2.4 ARE THERE ANY CONCERNS OR ISSUES IDENTIFIED WITH THE UPS BOWTIE BARRIER CHECKLIST OR BARRIER VERIFICATION CHECKFORM?				7.5 ARE THERE BACKING HAZARDS?			
2.5 OTHER: _____				7.6 OTHER: _____			
3.0 PROCEDURES				8.0 DANGEROUS GOODS			
3.1 DO ANY WORKER MISS THE PRE-JOB SAFETY MEETING?				8.1 ARE THERE ANY NEW CONCERNS REGARDING THE USE OF EXPLOSIVES, RADIATION, OR CHEMICALS?			
3.2 ARE JOB PROCEDURES INADEQUATE TO PERFORM THE JOB SAFELY?				8.2 ARE THERE ANY CONCERNS REGARDING THE USE OF LITHIUM BATTERIES?			
3.3 ARE THERE ANY FATIGUE CONCERNS DURING JOB EXECUTION?				8.3 ARE THERE ANY HAZARDOUS CHEMICALS ON LOCATION WITHOUT A SAFETY DATA SHEET (SDS)?			
3.4 IS THERE CHANGE IN JOB SCOPE THAT REQUIRES A MANAGEMENT OF CHANGE (MOC)?				8.4 OTHER: _____			
3.5 OTHER: _____				9.0 DROPPED OBJECTS			
4.0 ENVIRONMENTAL				9.1 DOES THE LOAD WEIGHT EXCEED THE LIMIT OF THE LIFTING EQUIPMENT?			
4.1 ARE THERE ANY DRAINS, DITCHES, OR DISCHARGE POINTS THAT WOULD BE A SPILL/LEAK CONCERN?				9.2 ARE THERE ANY UNSECURED TOOL/EQUIPMENT?			
4.2 ARE THERE ANY OILY DRIPS, WASTE, OR OTHER ENVIRONMENTAL CONCERNS NOT ADDRESSED?				9.3 ARE PERSONNEL REQUIRED TO BE IN THE RED ZONE (DROP ZONE) DURING LIFTING OPERATIONS?			
4.3 ANY NEARBY BODY OF WATER THAT COULD BE AFFECTED BY WORK ACTIVITY?				9.4 IS THERE ANY LIFTING EQUIPMENT THAT HAS NOT BEEN INSPECTED OR CERTIFIED?			
4.4 ARE THERE ANY WASTE STREAMS NOT MANAGED?				9.5 IS THERE ANY AUXILIARY EQUIPMENT USED AT HEIGHTS WITHOUT SECONDARY RETENTION? (I.E. HAND TOOL, GUIDES, ETC...)			
4.5 DO ANY SOLVENTS OR PAINTS CONTAIN CHLOROFLUOROCARBON (CFC), HYDROFLUOROCARBON (HFC), OR LEAD?				9.6 ARE ANY WORKERS UNAWARE OF THE LIFT PLAN DETAILS FOR THIS TASK?			
4.6 OTHER: _____				9.7 OTHER: _____			

5 Fundamentals of a Perfect Day



START

- Identify Hazards
- Control Hazards
- Verify Barriers

EXECUTE

- Follow Processes & Procedures
- Manage Change

FINISH

- Learn & Improve

QUESTIONS?

**BAKER
HUGHES**
a GE company

