



LAMPIRAN 1

MAINTENANCE & PROJECT

BUSINESS UNIT :		LOCATION :		CONTROL NUMBER (IMPACT) :	
OBSERVER NAME :			OBSERVATION DATE :		OBSERVATION TIME :
POSITION :		OBSERVEE POSITION :		OBSERVEE'S SUPERVISOR :	
		<input type="checkbox"/> EMPLOYEE <input type="checkbox"/> CONTRACTOR		REGULAR JOB ? <input type="checkbox"/> YES <input type="checkbox"/> NO REGULAR SHIFT ? <input type="checkbox"/> YES <input type="checkbox"/> NO	
TASK OBSERVED (THICK ONE THAT BEST APPLIES)					
<input type="checkbox"/> ELECTRICAL CONSTRUCTION WORK <input type="checkbox"/> HEAVY EQUIPMENT PM / REPAIR <input type="checkbox"/> ELECTRICAL REWIND <input type="checkbox"/> COFT <input type="checkbox"/> A/C REPAIR/MAINTENANCE <input type="checkbox"/> INSTRUMENT PM / REPAIR <input type="checkbox"/> INSTRUMENT CALIBRATION <input type="checkbox"/> MEASUREMENTS <input type="checkbox"/> MARK II/IV SPEEDTRONIC <input type="checkbox"/> ENVIRONMENTAL / REMEDIATION <input type="checkbox"/> MATERIAL TREATMENT / PWHIT <input type="checkbox"/> ELECTRICAL PM / REPAIR		<input type="checkbox"/> MECHANICAL PM / REPAIR <input type="checkbox"/> MECHANICAL BALANCING <input type="checkbox"/> MACHINERY DIAGNOSTIC <input type="checkbox"/> CONFINED SPACE ENTRY <input type="checkbox"/> CC CONTROL <input type="checkbox"/> RELOCATING EQUIPMENT <input type="checkbox"/> HEAVY EQUIPMENT OPERATION <input type="checkbox"/> CRANE INSPECTION / REPAIR <input type="checkbox"/> CIVIL CONSTRUCTION <input type="checkbox"/> MACHINING <input type="checkbox"/> PAINTING <input type="checkbox"/> MATERIAL INSPECTIONS		<input type="checkbox"/> ABRASIVE BLASTING <input type="checkbox"/> PIPING <input type="checkbox"/> EQUIPMENT REMOVAL/DEMOLISHING <input type="checkbox"/> HEAVY LIFTING / RIGGING / CRANE OPERATION <input type="checkbox"/> LIGHT VEHICLES MAINT / REPAIR <input type="checkbox"/> HANDLING HAZARDOUS MATERIAL <input type="checkbox"/> ERECTING EQUIPMENT / SCAFFOLDINGS <input type="checkbox"/> WORK AT HEIGHTS (Over 1.5 Meters) <input type="checkbox"/> HOT STICK LIFTING EQUIP. OPS. <input type="checkbox"/> EXCAVATION / EARTH MOVING <input type="checkbox"/> WELDING / CUTTING / BURNING / GRINDING <input type="checkbox"/> OTHER (DESCRIBED)	
DESCRIPTION OF TASK & BACKGROUND INFORMATION					
OBSERVED STANDARDS					
PERSONAL PROTECTIVE EQUIPMENT		ok	???	COMMENTS	
0101	HEARING PROTECTION				
0102	HEAD PROTECTION				
0103	EYE/ FACE (SAFETY GLASSES, GOGGLES, FACE SHIELD)				
0104	HANDS (APPROPRIATE GLOVES FOR TASK)				
0105	FEET (SAFETY SHOES, BOOTS)				
0106	PROTECTIVE CLOTHING / SUIT / APRON / COVERALL				
0107	RESPIRATORY PROTECTION				
0108	FALL PROTECTIONS / SAFETY HARNESS				
0112	PERSONAL FLOATATION (LIFE JACKET / VEST)				
BODY USE & POSITIONING		ok	???	COMMENTS	
0201	LIFTING / PUSHING / PULLING / BENDING / REACHING				
0202	LINE OF FIRE / SAFETY POSITIONING				
0203	PINCH POINTS / SCRAPING SURFACES				
0204	ASCENDING / DESCENDING (LADDER, STAIRS, ETC)				
0205	WALKING				
0206	EXCESSIVE EFFORT/OVEREXERTION				
0207	EYES ON TASK				
0212	UPWIND OF POTENTIAL VAPORS (GAUGE HATCH, ETC)				
WORK ENVIRONMENT		ok	???	COMMENTS	
0301	WORK / WALK SURFACE FREE OF OBSTRUCTION				
0307	WARNING DEVICES / BARRICADES / BARRIERS				
0308	FIRE EXTINGUISHER / SPRINKLES				
0312	SAFE (STABLE) WORKING AREA				
0320	ADEQUATE LIGHTING				
0325	HOT / COLD OBJECTS				
OPERATING REQUIREMENT		ok	???	COMMENTS	
0401	SPS(A3 A) / JOB PLANNING / PRE-JOB INSPECTION				
0406	LOCK-OUT / TAG - OUT (LOTO)				
0409	WORK PERMIT / AUTHORIZATION				
0411	TOOLS / EQUIPMENT SECURED ALOFT				
0413	HOISTING / LIFTING OPERATION				
0414	JSA/ PROCEDURES FOLLOWED				
0418	ADEQUATE COMMUNICATION WITH OTHERS				
0426	MOTORIZED VEHICLES OPERATION (FORKLIFT, ETC)				
0429	GAS TESTING				
0433	HANDLING PARTS / MATERIALS				
0448	SECURE / CLEAN AREA WHEN COMPLETE				
TOOLS / EQUIPMENT		ok	???	COMMENTS	
1501	SCAFFOLDING				
1502	PORTABLE LADDERS				
1505	HAND TOOL SELECTION / CONDITION / USE				
1506	POWER TOOL SELECTION / CONDITION/USE				
1507	EQUIPMENT SELECTION /CONDITION/USE				
1510	ELECTRIC CABLES / CONNECTIONS / GROUNDING				
1554	COMMUNICATION EQUIPMENTS /CONDITION/USE				
QUALITY / ENVIRONMENTAL		ok	???	COMMENTS	
1801	CONFIRMS DELIVERY / RECEIPT QUANTITIES				
1701	PROPER STORAGE / DISPOSAL OF WASTE MATERIALS				
1703	PRECAUTION TAKEN TO AVOID ENVIRONMENTAL DAMAGE				
1704	COMPLIANCE WITH REGULATIONS				
1705	ADEQUATE DRIP CONTAINERS USED				

MAINTENANCE & PROJECT

POSITIVE COMMENTS						
FEEDBACK SESSION CONDUCTED BY OBSERVEE SUPERVISOR NAME :		DATE :		TIME :		
OBSERVEE COMMENTS						
CONCLUSIONS (WHY QUESTIONABLE ITEMS OCCURRED)						
ROOT CAUSE ANALYSIS FACTORS						
PERSONAL FACTOR:			JOB FACTOR:			
(1) <input type="checkbox"/> JACK OF SKILL OR KNOWLEDGE			(5) <input type="checkbox"/> LACK OF OPERATIONAL PROCEDURES OR WORK STANDARDS			
(2) <input type="checkbox"/> CORRECT WAY TAKES MORE TIME AND/OR REQUIRES MORE EFFORT			(6) <input type="checkbox"/> INADEQUATE COMMUNICATION OF EXPECTATIONS REGARDING PROCEDURES OR STANDARDS			
(3) <input type="checkbox"/> SHORTCUTTING STANDARD PROCEDURES IS POSITIVELY REINFORCED OR TOLERATED			(7) <input type="checkbox"/> INADEQUATE TOOLS OR EQUIPMENT			
(4) <input type="checkbox"/> PERSON THINKS THERE IS NO PERSONAL BENEFIT TO ALWAYS DOING THE JOB ACCORDING TO STANDARDS						
QUESTION ITEM #	RC #	OIMS	RECOMMENDATION	PERSON RESPONSIBLE	AGREED COMPLETION DATE	COMPLETED DATE
REVIEWED BY	REVIEWER TITLE	DATE	COMMENTS			



LAMPIRAN 2

Procedure Manual Behavior Observation

Document Revision Record

Rev #	Date	Description	Owner	Administrator
0		The Behavior Observation Procedure Manual developed in order to provide detail guideline	Prod. Manager	SHE Coord.

Scope This procedure addresses the basic element of Behavior Observation within Company facility and applies to all Contractor employees

Objective The Objectives of this procedure are :

- Provides positive reinforcement for significantly important behaviors that are correct and consistent with work standards.
- Constructively identifies and eliminates deviations from these work standards.
- Effectively in changing behavior for a loss-free operations.

Responsibility **Leader or Equivalent Functional Leader.**

- Conducts field follow-ups for verification and validation.
- Provides “coaching” as needed to ensure high quality observation
- Monitors entire Loss Prevention Observation system for quality.

First Line Supervisor.

- Facilitates selection of target areas and initiates scheduling of Behavior Observation.
- Reviews Behavior Observation form for quality.
- Leads feedback session after field observation is done.
- Conducts field follow-ups for verification and validation.

Observee.

- Performs task/process as normally done.
- Participates in discussion with supervisor and observer, regarding identification of root cause(s) of undesirable activities/conditions and solution(s) to prevent recurrence

Observer.

- Compares work activities and conditions with standards.
 - Notes critically important and correct behaviors.
 - Identifies deviations from work standards.
 - Gives supervisor a brief overview of observations.
 - Participates in discussion with supervisor and observee, regarding identification of root cause(s) of undesirable activities/conditions and solution(s) to prevent recurrence.
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**Behavior
Observation
Process****Identify target areas**

- Select tasks, processes, or occupations having greatest potential for loss reduction.
- Base selection on history of losses, as well as hazard levels associated with different tasks.

Selection of Observer

- Must be trained as Observers
- Rotate observers periodically to include everyone over time

Scheduling & Preparation for Behavior Observation

- **Schedule the observation in advance to allow for some flexibility in timing.**
 - May need to adjust timing to match occurrence of infrequent activities.
 - **Review pertinent information associated with process:**
 - Prior incidents/near losses
 - JSA, Procedure, or Job Standard
 - Other recent Behavior Observation
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Conducting the observation

➤ **How often should Behavior Observation be done?**

- No fixed frequency
- Frequency consistent with loss history and hazard potential.
- General “rule of thumb” = 1 Observation per 10 workers per week.

➤ **When should Behavior Observation be done?**

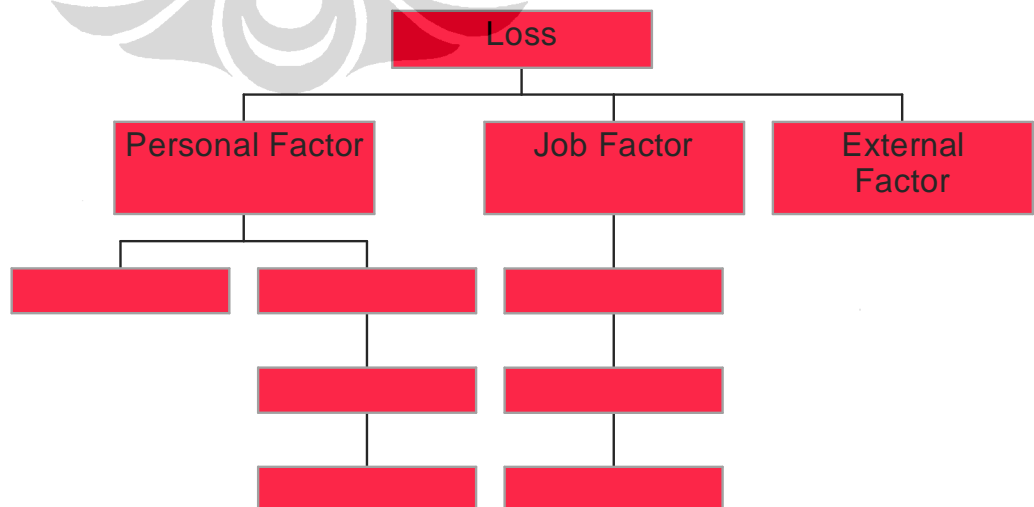
- Throughout the shifts.
- Representative of what occurs in workplace.

➤ **How long should Behavior Observation last?**

- Approximately 20 to 30 minutes for most observations.
- Can vary, based on circumstances.

➤ **Root cause(s) determination for deviations from work standards.**

- One of most important parts of observation process.
- Use Root Cause Analysis Flow Chart (RCAF).
 - Distinguish between root causes and symptoms.
- Use of RCAF technique is key to changing behavior.



➤ **Who reviews Behavior Observation?**

- Dept Leaders should review Behavior Observation data.
- Reviewers look at Behavior Observation form and verify solutions address the root causes and are feasible (using paper form or electronically)
- If reviewer not in agreement with root causes and/or solutions, recycle to supervisor / observer team with specific guidance for modifications.

➤ **Where to Submit?**

- Behavior Observation data/Form are sent to Behavior Observation Administrator.
- Behavior Observation Administrator is responsible for tracking, analyzing, and trending the data then communicated monthly to Dept Leader.

➤ **Communication of Behavior Observation Information**

- Communication that occurs during field follow-ups.
 - Between supervisor/manager and employee.
 - For input regarding verification and validation.
- Communication of trends and tendencies, based on analysis of Behavior Observation data, at each operational site are presented by Behavior Observation Admin on monthly basis

Feedback session after observation is done.

Feedback Session

- Conducted within one hour of completion of observation, if possible.
 - Led by supervisor.
 - Create three-way discussion among participants.
 - Active participation by observee and observer.
 - Limit discussion to observation issues.
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- **Administrative Data**
 - Complete all relevant sections.
 - Used for data analysis and administrative functions.
 - **Behavior Observation Line Items / Task Observed**
 - List includes critical actions for performance of the job type being observed – Behavior Observation forms can be tailored for different tasks
 - Each time action is performed, observer marks correct or questionable
 - **Background Information & Miscellaneous Comments**
 - Operational situation at time of Behavior Observation.
 - Reviewer includes considerations not identified elsewhere.
 - **Items Correct.**
 - Indicates tasks completed safely.
 - Helps in understanding “strengths.”
 - **Questionable Items.**
 - Indicates deviations from accepted or expected action/condition.
 - Helps to focus on areas for improvement.
 - Can include questions regarding validity of procedure as well as whether procedure being followed.
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Side 2

➤ **Observer's Positive Comments**

- Significant activities observed as performed correctly.
- Used in discussion/feedback session.

➤ **Observee comments**

- To be completed by Supervisor during feedback session

➤ **Conclusions.**

- Explains "why" questionable activity occurred or unsafe condition existed.

➤ **Root Cause Analysis.**

- List "questionable item #" and "root cause analysis #".
- Use Root Cause Analysis Flow Chart.

➤ **Solution / Recommendation**

- Description of solution to root cause(s).
- Person responsible by name and agreed due date.
- Closure date when solution completed.
- Solutions can be tracked in IMPACT.
- Reviews can be documented electronically in IMPACT

➤ **Review.**

- Includes field verification and validation of solution.
 - Describes results as witnessed in field.
- Includes quality review of information by LPS Coordinator or line manager
 - Helps to ensure appropriate levels of management stay involved
- Reviews can be documented electronically in IMPACT

➤ **Comments.**

- Provide more explanation regarding specific activities to help clarify/resolve issues.
- Required for each questionable item.

- Also used for positive comments.
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➤ **Totals & % Safe** (Bottom of Form).

- Estimate rough percentage of actions observed as done according to standards.
 - Used in positive comments portion of feedback session.
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Summary of Form Completion

- Administrative & background
 - Observer can complete before doing field observation.
 - Items correct, questionable items, comments
 - Observer completes during the field observation.
 - Positive comments
 - Observer completes immediately following field observation.
 - Conclusion, root cause(s) & solution(s), review
 - Supervisor completes during feedback discussion session.
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