

PIAG PRACTICAL ASSURANCE SERIES

HIRA and JSA Practical Guide

A field-ready guide and worksheet set for hazard identification, risk assessment and job planning.

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Perspective Industrial Assurance Group Ltd.
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Practical reference only. Verify applicable legal, client and site-specific requirements.

PIAG

01 / HIRA AND JSA: DIFFERENT LEVELS OF CONTROL

HIRA and JSA: Different Levels of Control

HIRA identifies and evaluates risk across an activity, process or area. JSA breaks a specific job into steps so the work team can identify hazards and verify controls before execution.

Tool	Best used for	Review triggers
HIRA	Processes, areas, routine activities and broader risk registers	Change, incident, new equipment, periodic review or control failure
JSA	A defined job or task at the point of planning and execution	Changed conditions, crew, sequence, equipment, weather or unexpected hazard

FIELD RULE

If the job conditions do not match the assessment, stop and review the work. A signed JSA is not permission to continue under changed or uncontrolled conditions.

02 / RISK MATRIX AND CONTROL HIERARCHY

Risk Matrix and Control Hierarchy

Define consequence and likelihood criteria before scoring. Use the matrix consistently and document the controls on which the residual rating depends.

Likelihood / Consequence	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Severe
5 Almost certain	M	H	H	E	E
4 Likely	M	M	H	E	E
3 Possible	L	M	H	H	E
2 Unlikely	L	L	M	H	H
1 Rare	L	L	M	M	H

Priority	Control type	Examples
1	Eliminate	Remove the hazard or avoid the hazardous task.
2	Substitute	Use a safer material, method, equipment or process.
3	Engineering	Isolate, guard, automate, ventilate or physically separate.
4	Administrative	Procedure, permit, planning, supervision, signage or rotation.
5	PPE	Last line of defense selected for the remaining exposure.

03 / HIRA WORKSHEET

HIRA Worksheet

Assess the activity or process, identify credible consequences and specify controls that can be verified.

Site / department	
Activity / process	
Assessment team	
Assessment date / review date	
Applicable requirements	

Hazard / source	Potential consequence	Existing controls	Initial risk	Additional controls / owner	Residual risk

04 / JOB SAFETY ANALYSIS WORKSHEET

Job Safety Analysis Worksheet

Break the job into logical steps. Avoid steps that are so broad that hazards disappear or so detailed that the JSA becomes unusable.

Job / work order	
Location	
Supervisor and work team	
Permit references	
Tools / plant / materials	
Emergency arrangements	

Job step	Hazard and consequence	Required control	Control owner / verifier

05 / PRE-START VERIFICATION AND DYNAMIC REVIEW

Pre-Start Verification and Dynamic Review

The supervisor should verify critical controls at the worksite and repeat the review whenever conditions change.

Ref	Requirement / verification question	Evidence / comment	Status
01	The crew understands the job steps and stop-work authority.		☐ Y ☐ N ☐ N/A
02	Permits, isolations and authorizations are valid.		☐ Y ☐ N ☐ N/A
03	Tools, plant, access and PPE are inspected and suitable.		☐ Y ☐ N ☐ N/A
04	Exclusion zones, guarding and engineering controls are in place.		☐ Y ☐ N ☐ N/A
05	Simultaneous operations and nearby work are controlled.		☐ Y ☐ N ☐ N/A
06	Weather, lighting, ground and environmental conditions are acceptable.		☐ Y ☐ N ☐ N/A
07	Emergency communication, rescue and first-aid arrangements are ready.		☐ Y ☐ N ☐ N/A
08	Changes since assessment have been discussed and controlled.		☐ Y ☐ N ☐ N/A

Toolbox discussion led by / time	
Changes identified	
Additional controls	
Work authorized by / time	
Work suspended / reassessed because	