

Location:	Terga	Date of Assessment:	17- 09 - 2009	Assessment No:	013	Rev - 0
Assessor(s):	Biman Modak	System/Activity:	Sand Blasting and Painting.			

Probability & Frequency	Definite	5	5	10	15	20
	High	4	4	8	12	16
	Moderate	3	3	6	9	12
	Low	2	2	4	6	8
	Negligible	1	1	2	3	4
			Minor	Serious	Major	Catastrophic
Severity						

Key to Priorities
 Medium Priority (5 days)
 High Priority (2-3 days)
 Immediate

INTRODUCTION

The table below provides a simplified representation of the methodology used and the processes involved in this Hazard Identification & Risk Analysis Procedure (Risk Management) to be undertaken by OCIA and all Subcontractors in order to initiate, act on, review and effectively manage project-related risks throughout the Construction Phase.

IDENTIFICATION - Pre planning , Method statement , Job safety analysis.	ASSESSMENT – Impact, Risk factor, Mitigation measure, Residual risk	IMPLEMENTATION & COMMUNICATION	REVIEW & UP DATE
Identify activities , Identify hazards	Assess Impacts, Analyze Risk , Establish Mitigation Measures.	Communication & Training	Audit, Inspection & Up dating of Log.

Hazards Identified (include the exposed groups)	Probability 1 - 5	Severity 1 - 4	Risk 1 - 20	Control Measures to be Implemented	Probability 1 - 5	Severity 1 - 4	Risk 1 - 20	Residual Risk	Date Action Completed
General concept about Sand Blasting and Painting .	3	2	6	<p>Sandblasting is a special physical process that uses a stream of sand propelled by water or compressed air and applied on a surface. Texas sandblasting creates a powerful abrasive force that can act on any surface worked on using this air-propelled material. There are alternative sandblast materials that can be used depending on the requirement of the work. These include iron globules, emery and powdered quartz.</p> <p>Sandblasting is commonly used for cleaning the cast irons in foundry shops. It is also the preparatory process done on different kinds of surfaces before enameling, painting and during the process of galvanizing. It is also a popular cleaning solution for surfaces with hard to remove grime and other debris that accumulate in the concrete surfaces of buildings.</p>	2	2	4		

Personal protection equipments during sand blasting and painting work.	3	3	9	<p>It should be noted that sandblasting and painting jobs can be hazardous as workers are exposed to toxic elements during the process. There are a wide range of harmful particles which may include zinc or lead which are common components in coatings. When the sandblast operations are being done , steps should be undertaken to protect the operation group from the harmful effects of the abrasive materials being used. Protective gears like goggles and appropriate clothing are extremely important if the persons are going to do sandblasting / painting work. The potential harm and injury that can be brought on the person doing the sandblasting operations makes it extremely important that safety regulations are observed before and during any sandblasting operation.</p> <p>In any typical sandblasting / painting operation, the standard air breathing equipment must be used. This is necessary as the operators need to have a steady supply of clean air in a workplace where there is a heavy volume of toxic and harmful contaminants. Before any sandblast operation, it is imperative that the concerned person must inspect the air breathing apparatus to make sure that it delivers a steady flow of clean air. The operators are strongly advised to remove the air breathing equipment after operation only when they at a safe distance from the work area as harmful particulates remain suspended in the air even after the sandblast operations.</p> <p>The crew must also wear standard issue gloves and coveralls while within</p>	2	3	6		
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	3	3	9	Before undertaking any sandblast jobs, it is important that the chosen workplace will not pose any danger and harm to the workers and the general public. On top of the proper selection of the appropriate workplace, it is also essential that safety procedures are observed with regard to the appropriate sandblast / painting machine / devices to be used. For the details of the safety measures applied to the machine, it is important that the operator's instruction and safety manual to be demonstrated to the operator before any operation is started.	2	3	6		
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Safe access / egress . Work inside the confined space.	3	3	9	<p>All access routes to remain clear and free from obstructions.</p> <p>Area to be kept tidy at all times.</p> <p>Adequate access ladders with fall arrest system installed.</p> <p>A pre tested and certified man basket and scaffolding to be used to access difficult areas.</p> <p>Man basket to be checked daily by a competent person prior to use.</p> <p>The man basket must be checked each time it is attached to the crane.</p> <p>Shackles are secured and pinned.</p> <p>Shackles and rings are not deformed and pad eyes are not damaged.</p> <p>Slings and rings in good condition.</p> <p>Handrails are in good condition.</p> <p>Floor plating and kick plates are in good condition. A healthy working atmosphere has to be maintained inside the confined space keeping appropriate exhaust / opening to pass out logged , entrapped welding gases. Adequate lighting arrangement has to be provided at the work place.</p>	2	3	6		
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