

HSSEQ Form RA-003 Excavation and Breaking Ground	Revision 0
RISK ASSESSMENT & ENVIRONMENTAL IMPACT	



TASK / ACTIVITY	Excavation and Breaking Ground		ASSESSMENT DATE	29/07/2016	NEXT REVIEW	28/07/2017	RECORD No	RA-003
		TYPE OF RA	MAIN OPERATIONS <input checked="" type="checkbox"/>		TASK SPECIFIC <input type="checkbox"/>		LOCATION SPECIFIC <input type="checkbox"/>	
LOCATION	All locations	ASSESSOR	P. Manolopoulos	REVIEWER	I. Pavlidis	MAIN OPER RA AVAILABLE	N/A	
PERSONS AT RISK	Foreman/Workers/Visitors			PTW REQUIRED	YES <input type="checkbox"/> / NO <input checked="" type="checkbox"/>	SPECIFY	N/A	
ASSOCIATED RAs / SOPs	SOP-003 Excavation and Breaking Ground							

** To be used with the HSE Impact Matrix (A01-01) & HSE Risk Assessment Impact Flowchart(A01-02)*

No	POTENTIAL HAZARD / ENVIRON. ASPECT	RISK / ENVIRONMENTAL IMPACT	INITIAL RISK	CONTROL MEASURES	RESIDUAL RISK	ACTION BY
01	Ground collapse / Cave-in	<ul style="list-style-type: none"> • Serious injury to fatality (internal injury, broken bones, suffocation) • Equipment loss / damage • Environmental damage (landscape deformation) 	H6	<ul style="list-style-type: none"> • Excavation plan to be prepared by competent engineer (type of soils, excavation sidewall angles etc.) • Additional reinforcement of sidewalls if necessary 	M4	<p style="text-align: center;">Safety Engineer</p> <p style="text-align: center;">On site manager/ Foreman</p>
02	Hazardous atmosphere (inhalation of dust, hazardous substances, released gases)	<ul style="list-style-type: none"> • Inhalation • Skin contact • Ingestion through contaminated food / drinks • Skin and eyes irritation • Adverse acute and long term 	M4	<ul style="list-style-type: none"> • Obligatory use of Safety breathing masks • Obligatory use of work uniforms / cleaning after works • Additional breathing apparatuses where necessary 	L2	<p style="text-align: center;">On site manager/ Foreman</p>

		health effects				
03	Noise High levels of noise caused by breaking, and drilling works	Exposure to noise Occupational hearing loss / Hearing disorders (e.g. headaches, blood pressure)	M4	<ul style="list-style-type: none"> Noise level measurements where deemed necessary Hearing conservation examinations Obligatory use of hearing protection PPE at high noise areas 	L2	On site manager/ Foreman
04	Vibrations Use of impact and/or rotating power tools	Exposure to high frequency vibrations Neural / blood vessel disorders / joint disorders	M4	<ul style="list-style-type: none"> Use of anti-vibrating tools and gloves Keep safe distance from excavation machinery Breaks according to work load 	L2	On site manager/ Foreman
05	Services above or underground (utilities, public lines, etc.)	Electrocution Injury / possible death from pressure lines	H6	<ul style="list-style-type: none"> SOP-010 Lock Out and Tag Out Identify, label and protect/support or remove/bypass all existing underground utilities / public lines accordingly. 	M4	On site manager/ Foreman
06	Vehicle movements, e.g. fork lifts, trucks etc.	Accidental move Crash or struck between Physical injury to all parts of body, possible death Damage to vehicles and structures	H6	<ul style="list-style-type: none"> Licensed drivers only. Vehicles not to enter the work area without prior arrangements by the Supervisor. Banksman to be used when reversing in tight spaces. Erect cones, light, signs, and barriers around work area. Vehicle engines to be switched off when vehicle is not in use. Abide by traffic rules Forklifts. Don't travel with forks up in air or overloaded, consider passers-by. Drive on even ground only. 	M4	On site manager/ Foreman

				<ul style="list-style-type: none">• Pedestrians to use footpaths where possible, wear high visibility clothing. Always be aware of moving plant and vehicles.		
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