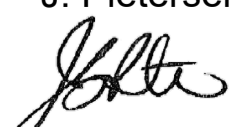
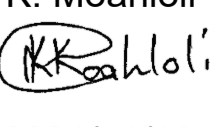


Conventional Island Piping Inspection Risk Register

Department	Group	# number	Activity / Service / Product / Process / System	Aspect	Hazard / Potential Incident	Impact	Risk Category	Initial Frequency	Initial Probability	Initial Severity	Initial Risk Value	Initial Risk Classification	Mitigation	Legal Requirements	Frequency	Probability	Severity	Final Risk Value	Final Risk Classification	Completed By:	Reviewed By:	Authorised By:	date:			
<p>Although captured in the mitigations below, prior to performing ANY activity, ALWAYS consider the following: STOP TOOLS, i.e. self checking, pre-job brief, peer checking, procedure use, place-keeping, questioning attitude, effective communication, coaching, handover and authorisation and knowledge; OTHER CONTROLS, i.e. monitoring, measurement & inspection; Operational control i.e. procedures; SHE programme; Engineering control</p> <p>Applicable Legal & other Requirements & applicable sections (Eg. National Environmental Management Waste Act no. 93 of 2008, Section 19); National water act Section 4; National Environmental Management Act, Section Y)</p> <p>OPERATIONAL / ENGINEERING CONTROL (i.e. based on equipment, procedures)</p> <p>MONITORING & MEASUREMENT (i.e. inspection, monitoring)</p> <p>ADMINISTRATIVE / PROGRAMME (i.e. training, protective measures)</p>																										
Contractor	MT	ACT 001	V-service Testing	Use of equipment to determine leaks in valves	Working in plant (during online)	Injury	P	0.5	0.0	1.0	1.5	Very Low Risk	Working procedure. Use a lock in cases of poor fit areas.	Observation feedback, incident trending	Activity to be performed by authorised persons, 2m Rule, Situational awareness, CE, pre job brief, Connect PPE	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	0.5	0.0	0.0	0.5	Doubtful Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 002	V-service Testing in N2 areas	Entry into N2 hazard areas including vessels	Asphyxiation (N2)	Illness, fatality	P	1.0	-0.5	5.0	5.5	Medium Risk	PTW in force for any intrusive work. Use a calibrated and functional Oxygen monitor, confined space entry requirements apply where applicable (SAC)	Observation feedback, incident trending	2-man rule, PPE, HP tools, OE	OHS Regs (GNR 1179: Regulations for Hazardous Chemical Substances) Annexure 5 OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	1.0	0.0	2.0	3.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 002	V-service Testing in Heat stress areas	Activities in Heat stress areas	Heat stress, heat exhaustion, heat stroke, hot surfaces, steam	Illness, burns	P	1.0	0.0	3.0	4.0	Low Risk	PTW in force / LAR, SAC issued to RP DR 72	Observation feedback, incident trending, intake of fluids prior to start of work, take rest periods	All staff to be certified as Heat Stress workers, workers briefed by HP, correct PPE to be worn (long sleeve coveralls and gloves to protect against hot surfaces), 2-man rule, HP tools, OE	OHS Regs (GNR 2281: Environmental Regulations) Section 2(4) - Thermal Requirements, OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	1.0	0.0	2.0	3.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 005	Using ladders	Use of Cat ladder during V-service Testing	Falling from ladder / danger of dropping tools	Injury	P	2.0	0.0	3.0	5.0	Medium Risk	Maintain 3-point contact, ensure ladder is adequately supported, using of ladders or tags to secure tools	Inspection of ladders.	Wearing of correct footwear when accessing ladders, HP tools, OE, Ladder training, Use medically fit staff to perform task	OHS Regs (GNR 1031: Gen. Safety Regs) Section 13A (Ladders)	2.0	-0.5	1.0	2.5	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 006	Use of handtools	Activities with handtools	Injuries to personnel	Injury	P	2.5	1.0	3.0	6.5	Medium Risk	Inspect hand tools for damage before use, store handtools in storage area after use	Handtools to be on a checked and maintained good working condition, incident trend analysis	Activity to be carried out by trained staff, use handtools for intended purpose, HP tools, OE, Use of correct tools, use correct PPE.	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	2.5	0.0	2.0	4.5	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 006	Use of handtools	Activities with handtools	Damage to plant equipment	Equipment damage	A	2.5	1.0	2.0	5.5	Medium Risk	Correct transportation of handtools	Handtools to be on a checked and maintained good working condition	Activity to be carried out by trained staff, use handtools for intended purpose, HP tools, OE, Use of correct tools	OHS Regs (GNR 1031: Gen. Safety Regs) Section 15 - Duties not to interfere with, damage or misuse of things	2.5	0.0	1.0	3.5	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 007	Work on scaffolding and at heights	V-service Testing	Falling object or Person falling off scaffolding	Injury, fractures, fatalities	P	2.0	-0.5	5.0	6.5	Medium Risk	Scaffolding to be complete with handrails & kickboards, area barricaded as required	Scaffolding inspected regularly	Scaffolding erected by skilled person, valid permit tag must be on scaffold, wear relevant PPE, wear safety harness for heights > 2 m, HP tools, OE, RP requirements w/ scaffolding to be complied with	OHS Regs (GNR 1010: Construction Regs) Section 8(4) - Fall protection and Scaffolding OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	2.0	-1.0	3.0	4.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 008	Transport of equipment	Lifting, pushing and pulling of equipment	Injury to personnel	Injury	P	3.0	0.0	4.0	7.0	High Risk	Make use of trolleys to transfer equipment	Incident trend analysis	HP tools, PPE, OE, correct posture and ergonomics Materials handling, training	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	3.0	0.0	3.0	6.0	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	ACT 008	Exposure to noise environments	V-service Testing and walkdowns	Noise exposure greater than 85dB	Noise Induced Hearing Loss, temporary threshold shift	P	2.5	1.0	5.0	8.5	High Risk	Comply with MAN DR 009, Man-job specification to reflect correct noise levels.	Regular audiometric tests	Wear the correct PPE (earplugs/ear muffs), ensure earplugs are inserted correctly, HP tools, pre-job brief, STAP, OE, double hearing protection in areas where required. Adhere to all signposting.	OHS Regs (GNR 307: Noise Induced Hearing Loss) Section 3 - Exposure to noise and Section 5 - Duties of Employees OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	2.5	-0.5	0.0	2.0	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 010	Office Activities and ergonomics at workstations	Working on PCs, sitting position, use of mouse and keyboard, general activities in the office	Poor ergonomics	Work related to back, upper limb disorders, repetitive strain syndrome, carpal tunnel syndrome	P	2.0	0.5	2.0	4.5	Low Risk	Ergonomically designed chair, correct handling of materials, situational awareness.	Avoid long working sessions (regular relaxation of muscles), safe practices	Correct workstation layout, ergonomic assessment of workstation, ensure correct posture when performing activities in the office. Materials handling, PPE usage where applicable	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	2.0	-0.5	0.0	1.5	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 011	Office Fires and risks	Possibility of a fire in the office area causing harm to personnel	Flames and Smoke	Burns, injury, fatality, smoke inhalation	P	0.5	0.5	5.0	6.0	Medium Risk	Fire detection systems, fire extinguishers to be placed at allocated points. Extinguishers and needs to be working condition. Updated muster list.	Extinguishers and needs to be checked on a periodic basis	Staff made aware of Evacuation routes and Muster points, Fire Marshalls appointed, Regular fire drills, good housekeeping, fire extinguisher training. Adhere to signposting.	OHS Regs (GNR 2281: Environmental Regulations for Workplaces) - Fire precautions and means of egress	0.0	-1.0	2.0	1.0	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 011	Office Fires and risks	Possibility of a fire in the office area causing damage to equipment	Hazard due to fires in buildings	Property damage	A	0.5	0.5	5.0	6.0	Medium Risk	Fire detection systems, fire extinguishers to be placed at allocated points. Extinguishers and needs to be working condition.	Extinguishers and needs to be checked on a periodic basis	Regular fire drills, good housekeeping, fire extinguisher training.	OHS Regs (GNR 2281: Environmental Regulations for Workplaces) - Section 9 - Fire precautions and means of egress	0.0	-1.0	2.0	1.0	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 012	Emergency Planning	Evacuation and mustering during emergencies	Un-accounted personnel / trapped in dangerous areas	Injury / Fatalities	P	0.0	-0.5	4.0	3.5	Low Risk	Muster supervisors visible, Signposting, Muster areas and Evacuation routes identified	Observation feedback, incident trending	Regular Emergency Exercises	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	0	-0.5	2.0	1.5	Very Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 013	Ascending and descending stairs	Personal injury	Twisting and turning of back, legs and posture	Injury, fatality	P	2.5	1.0	3.0	6.5	Medium Risk	Use of handrails, non-slip surface on all steps	Incident trend analysis	Be cautious when ascending/descending staircase. Situational awareness, one hand free for using handrail, OE	OHS Regs (GNR 1010: Construction Regs) Section 8(4)	2.5	-0.5	2.0	4.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 014	Using lifts	Used for the conveyance of persons	Entering or Exiting lifts. Opening and closing inside or outside doors	First aid or possible medical injuries	P	2.5	0.0	3.0	5.5	Medium Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall, inform EMS when deficiencies are identified.	LR, escalator and passenger conveyor regulations accordance with the SABS 1545-10 or SABS 1545	2.5	0.0	2.0	4.5	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 015	Entering and Exiting office areas	Personal injury	Slips, trips and falls	First aid or possible medical injuries	P	3.0	0.5	2.0	5.5	Medium Risk	Be alert when opening doors and adhere to signposting	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	3.0	0.0	1.0	4.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 016	Walking in office areas, outside areas and plant areas	Personal injury	Slips, trips and falls	First aid or possible medical injuries	P	3.0	0.5	2.0	5.5	Medium Risk	adhere to signposting in all areas	N/A	SHE talk/CE, incident recall. Apply situational awareness	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	3.0	0.0	1.0	4.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 017	Walking in outside areas (e.g. ski cabins)	Personal injury	Slips, trips and falls	First aid or possible medical injuries	P	3.0	0.5	3.0	6.5	Medium Risk	Handrails installed, Sign posting in and around all cabins	Contractors to do monthly SHE inspections during walkdowns. Monthly checks of general conditions of walk ways	SHE talk/CE, incident recall. Apply situational awareness	OHS Regs (GNR 1031: Gen. Safety Regs) Section 2 - Personal Safety Equipment and Facilities	3.0	0.0	2.0	5.0	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 018	Holding onto Hand-rails	Walking to or from various areas within and outside ACP2 using staircases with handrails	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	0.5	5.0	8.0	High Risk	Handrails installed, Sign posting in and around all cabins	Contractors to do monthly SHE inspections during walkdowns. Monthly checks of general conditions of walk ways	Metro Cleaning to Monitor quantity/availability of disinfectant or sanitiser placed on identified stairs (NAB, B1, Electrical Building, NAB and Fuel Buildings)	Management instruction or directive to suspend use of handrails and staff to use route that do not necessitate the use of Handrails. Staff going to stair case should wear clean flat shoes and not high heels or sandals.	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	0.0	0.0	5.0	5.0	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09
Contractor	MT	Act 019	Pressing in access Pin at ACP2 and access controlled plant areas	Walking through ACP2 to site and various access controlled zones	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	1.0	5.0	9.0	High Risk	Install sanitizers or disinfectants at respective access controlled areas	Metro Cleaning to Monitor quantity/availability of disinfectant or sanitiser placed on identified stairs (NAB, B1, Electrical Building, NAB and Fuel Buildings)	raise an awareness and brief staff on the suspension	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 020	Pressing buttons of goods and passenger lifts on plant levels	Going to and from 18m level Operating and various plant levels	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	0.5	5.0	8.5	High Risk	Install sanitizers or disinfectants at respective sites	Metro Cleaning to Monitor quantity/availability of disinfectant or sanitiser placed on identified stairs (NAB, B1, Electrical Building, NAB and Fuel Buildings)	raise an awareness and brief staff on the suspension	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 021	Holding onto rungs of catladders on plant	Accessing plant equipment	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	0.5	5.0	8.0	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	2.0	-1.0	5.0	6.0	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 022	Using shared computers and mobile devices, printers, and pens	Performing administrative duties and communicating with other stakeholders or colleagues	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	1.0	5.0	9.0	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 023	Turning office / store rooms door handles	Accessing respective office or store areas	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	0.5	5.0	8.0	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 024	Exhaling onto breathalyzer test	Conducting alcohol test at both stores and ACP 2	Inhaling Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	1.0	5.0	8.5	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	0.0	-1.0	5.0	4.0	Low Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 025	Sitting in meetings, mass gathering (Work stops and Open Forums), and open plans in office building	Group meetings	Contact with and inhaling Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	1.0	5.0	8.5	High Risk	Adequate ventilation	Monitor ventilation efficiency. Monitor cleanliness of ventilation diffuser / vents	Management instruction or directive to suspend all mass gatherings and non-essential meetings. Management instruction or directive that all essential meetings to be conducted in a spacious room and by attendees sitting at least 1 meter apart and/or use IT tools to have remote meetings. Avoid shaking hands or greeting involving body contact. Apply personal hygiene (hand washing with soap).	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	2.0	-0.5	5.0	6.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 026	Conducting medical examinations (Spirometry)	Pre-employment, Periodic and Exit Medical examinations	Inhaling Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	2.5	1.0	5.0	8.5	High Risk	Adequate ventilation	Monitor ventilation efficiency. Monitor cleanliness of ventilation diffuser / vents	Management instruction or directive to have international workforce quarantined for at least 14 days prior and cleared by own doctor before coming to site for PFD process. Suspend spirometry until further notice. Exclude medical appointments to avoid close crowding at onsite and offsite medical centres (NAB and PFD centres). Apply good personal hygiene practice (hand washing with soap).	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 027	Using shared kitchen items (fridges, toasters, presser, water tap and hydrobottles)	Preparing refreshments	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	0.5	5.0	8.5	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 028	Using shared rest room facilities (toilet seats, handwash basins)	Bodyrest	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	0.5	5.0	8.5	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	2.5	-1.0	5.0	6.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Plant Engineering	MT	Act 029	Handling shared Equipment and Tools	Performing V-service Testing	Contact with Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	0.5	5.0	8.5	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	
Contractor	MT	Act 030	Accessing control room for RTW LAR and ops work related activities	Making contact with Control Room operators	Contact with and inhale Corona Virus (COVID 19)	Breath (SARS or Pneumonia), Fatality	P	3.0	0.5	5.0	8.5	High Risk	Be alert when entering a lift and comply with instructions as per the signposting.	N/A	SHE talk/CE, incident recall. Be cautious when opening and closing doors	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) Regulation 6, 10 & 11 of the Regulations for Hazardous Biological Agents and Annexure C.	1.0	-0.5	5.0	5.5	Medium Risk	J. Pieterse	K. Moahloli	T. Mthandi	2021/11/09	

J. Pieterse

 2021/11/10

K. Moahloli

 2021/11/10

T. Mthandi

 2021/11/10