Abseil Access LIMITED Newpark, The Ward, Co. Dublin, Republic of Ireland Tel. +353 1 80 41530 Fax +353 1 80 41531 Web: www.abseilaccess.ie E-mail: info@abseilaccess.ie
Specialist Access Systems

Method Statement, Risk Assessment and Rescue Plan for: XXXXXXXXXXXXXXXXXXX, Inspection of pressure shaft. Co.Wicklow. Republic of Ireland

This form is to be used with the risk assessment document. There will be constant reviews of this document throughout the procedure. Any changes that may occur will require and further risk assessment evaluation by a competent person.

Company Name	Abseil Access Limited Written Vladislav Melnicov, IRATA Level 3 Supervisor, IRATA 3/14XXX	**Date**	10/10/2011
Rope Access Equipment requirements	4 x Ascenders Croll Chest – Petzl EN567, EN12841 class B; 4 x Ascenders Handled (Right) – Petzl EN567, EN12841 class B; 2 x Ascenders Handled (Left) – Petzl EN567, EN12841 class B; 6 x Ascenders Shunt – Petzl EN567, 4 x ASAP with Absorbica, Mobile fall arrest device and Sewn-webbing energy absorber – Petzl EN12841 class A and EN355; 3 x Descenders Stop - Petzl EN341 class A, 2 x Descenders Perzl Rig – EN 12841 class C; 1 x Descender ID's Petzl EN 12841 class C; 4 x Helmets Vertex Best - Petzl EN397 EN12492; 4 x Sit Harnesses Navaho – Petzl EN813 EN358; 4 x Chest harness for seat harness - Petzl TOP EN361; 4 x Triangular steel quick link 8mm – Petzl Delta EN12275, 80 x Carabiners Oval Screw lock Oxan - Petzl EN362; 4 x Set's Cows tails Industrial (5m) - Singing Rock EN892; 1500m Semi-Static Ropes – Beal EN1891 Class A; 4 x Rescue Pulleys Fixe – Petzl EN12278, 14 x Anchor Straps – EN795 Class B	Sketch Attached	Yes Attachment A
Barriers and Signage requirements	Temporary barriers to protect third party, red and white tape, may install if necessary.		
Contact Info required:	1st Rope Access Technician/Supervisor – John Loyd (level 3) – 087XXXXXX (Will act as supervisor/rescue cover for all works) 2nd Rope Access Technician/Supervisor – Vladislav Melnicov (level 3) – 086XXXXXX 3rd Rope Access Technician - Brendan Ball (Level 1) – 086XXXXXX 4th Rope Access Technician - Robert Smith (Level 2) – 085XXXXXX		
Communication method/s	Two-way radios, Channel 1.		
Program of operations	Please see attached document for a detailed account of the set up procedure. All works will be carried out according to IRATA Code of Practice. There are three grades/levels in rope access. All worksites operated by IRATA must have at least one Safety Supervisor Level 3 on site as the person responsible for safety of the rope access systems and Level 1 and Level 2 rope access technicians who work under Level 3 close supervision. Explanation: Level 1: Rope access technician who is able to perform specified range of rope access tasks and simple descent rescue under supervision of Level 3. Level 2: Experienced rope access technician who has Level 1 skills plus more complex rigging, rescue and rope access skills, under the supervision of Level 3. Level 3: This is a rope access technician who is capable of complete responsibility for rope access safety in work projects, is able to demonstrate the skills and knowledge required for Level 1 and 2. Is conversant with relevant work techniques and legislation, has an extensive knowledge of advance rigging and rescue techniques and legislation. Has an extensive knowledge of advance rigging and rescue techniques holds an appropriate first aid certificate and has knowledge of IRATA international certification scheme.		

	Task: Rigging ropes in pressure shaft (Stage 1) Phase 1 – Pre job Briefing of risk assessment, method statement and safe rescue plan, obtaining all necessary permits from ESB. Phase 2 – Pre job toolbox talk to ensure all parts of the team understand their particular duties. Phase 3 – Equipment check and visual onsite review. Phase 4 – Prepare and set up ropes from suitable structural anchor points from the beams (blue) at the upper level. Scaffolding (or ladder) may be used to access girders/beams. Phase 5 - Lights for visual aid may be suspended on separate independent ropes, anchored from suitable points. Phase 6 – Communication: Rope access technicians and supervisors, will be communicate via own two way radios, channel 1. Phase 7 – Using ropes left from installation of link in pressure shaft, install extra two slings and shackles for back up support hard links from support gantry. Phase 8 – De-rig all ropes from the structural beams (blue) and install 4 wire slings and 4 carabiners. Phase 9 – Rig 2 x 100m ropes from 2 wire slings Phase 10 – Install 2 x Rescue Pulleys from another 2 wire slings Phase 11 – Pre-Rig another 2 x 100m trough rescue pulleys as rescue ropes and pack to the bags Phase 12 – On the 2 x 100m main and back up ropes will be rig two stopper knots, then ropes will be packed to the bags at ground level (zero point, floor of intake tower) Phase 13 – Vlad Melnicov (level 3) sing in confined entry book, then connect back up device and descender to main and backup ropes, connect 2 bags with the main and back up ropes to himself, then descent to top of intake gate, were install deviation from handrail of the platform on the top of intake gate, after check top seal on intake gate for leakage, communicate with supervisor. Phase 14 – Then continue descending to one of the three valves, open one for five turns, to be sure main valve not leaking. Phase 15 – After few minutes, close valve, communicate with supervisor. Phase 16 – Then continue descending to the bottom of intake gate, were from one of the bottom beams rig first re-belay, on the two ropes (main and back up) using two wire slings and two carabiners. Phase 17 – Check seal around bottom intake gate for leakage, and if leakage in suitable level, pass re-belay and communicate with supervisor. Phase 18 – Then continue desending to the to the bend of intake shaft, were rig next re-belay from the set of clicks using two carabiners connect directly to the holes in the clicks. Phase 19 – Then pass re-belay and communicate with supervisor, and continue descending to the end of the ropes, were he connect to near set clicks, and wait when another rope access technician (Brendan Peate) will deliver for him another two bags with 2 x 100m ropes. Phase 20 – Robert Peate (Level 2) sing in confined entry book, then connect back up device and descender to main and backup ropes, then descent down to the platform on the top of intake gate, move in, connect lanyards to platform handrails, disconnect his devices from the ropes, communicate with supervisor, and take stand by position on the platform. Phase 21 – Then Supervisor will connect one of rescue ropes to the 2 bags with 2 x 100m ropes, and using descender devise, send down to the pressure shaft bend under Robert visual control and supervisions. Phase 22 – Brendan Peate (level 1) sing in confined entry book, then connect back up device and descender to main and backup ropes, then descent to top of intake gate, were pass deviation, after descent, pass two re-belays, to the bags suspended on the rescue rope, connect bags to himself, disconnect bags from rescue rope. At each point of maneuvers (deviation, re-belay, ect.) he will communicate with supervisor. Phase 23 – Then descent to Vlad Melnicov level, and pass bags with the ropes. Phase 24 – The Supervisor pull up rescue rope, and prepare next two bags with the ropes Phase 25 – Vlad Velnicov, will continue descent down and rig ropes, install re-belays awry 40-50m (awry second set of clicks), and joint all ropes at the end with next one using knot " re-trend figure of 8), communicate with supervisor at each phase of rigging. Phase 26 – The Supervisor will control lowering bag with the ropes to the bend of pressure shaft. Phase 27 – Robert Peate will visual supervise lowering process. Phase 28 – Brendan Peate will ascent up to the bend of pressure shaft pick up the bags with the ropes, and then deschent down and pass bags to Vlad Melnicov, then required. Phase 29 – Then the rigging the ropes in pressure shaft will be finished, if manifold will be opined, Vlad Melnicov and Brendan Peate will communicate to supervisor before and after exit from pressure shaft. If manifold will be closed, ascent all way up to the zero level. Phase 30 – Robert Peate, will connect his ascenders and back up to the ropes, disconnect lanyards from handrails, and ascent up to zero point. **End Stage 1**

	Task: Inspection of pressure shaft(Stage 2) Phase 1 – Pre job Briefing of risk assessment, method statement and safe rescue plan. Phase 2 – Pre job toolbox talk to ensure all parts of the team understand their particular duties. Phase 3 – Equipment check and visual onsite review. Phase 4 – Communication: Rope access technicians and supervisors, will be communicate via own two way radios, channel 1. Phase 5 – Brendan Peate (Level 1) sing in confined entry book, then connect back up device and descender to main and backup ropes, then descent down to the platform on the top of intake gate, move in, connect lanyards to platform handrails, disconnect his devices from the ropes, communicate with supervisor, and take stand by position on the platform. Phase 6 – Vlad Melnicov (level 3) sing in confined entry book, then connect back up device and descender to main and backup ropes, then descent to top of intake gate, were pass deviation, after descent, pass two re-belays, to the bend of pressure shaft. At each point of maneuvers (deviation, re-belay, ect.) he will communicate with supervisor. Phase 7 – Then Robert Peate (level 2) sing in confined entry book, then connect back up device and descender to main and backup ropes, then descent to top of intake gate, were pass deviation, after descent, pass two re-belays, to the bend of pressure shaft. At each point of maneuvers (deviation, re-belay, ect.) he will communicate with supervisor. Phase 8 – Then Vlad Melnicov (level 3) and Robert Peate (level 2) will descent down to the bottom of pressure shaft and visual inspect awry set of clicks and bottom of pressure shaft for any objects, passing re-belays, and communicate with supervisor at each point of maneuvers. Phase 11 – If manifold will be opined, Vlad Melnicov and Robert Peate will communicate to supervisor before and after exit from pressure shaft. If manifold will be closed, ascent all way up to the zero level. Phase 12 – Brendon Peate, will connect his ascenders and back up to the ropes, disconnect lanyards from handrails, and ascent up to zero point. **End Stage 2** **Stage 3 – De-rigging ropes in pressure shaft (Stage 1)** Phase 1 – Pre job Briefing of risk assessment, method statement and safe rescue plan. Phase 2 – Pre job toolbox talk to ensure all parts of the team understand their particular duties. Phase 3 – Equipment check and visual onsite review. Phase 4 – Communication: Rope access technicians and supervisors, will be communicate via own two way radios, channel 1. Phase 5 – De-rigging ropes will be in reverse mode of Stage 1 Phase 6 – Remove all equipment, clean working area; return all permits to ESBI office, Job finished. **End Stage 3**		
Access Method/s	Access to internal part of intake manifold will be through the door on the intake tower from floor at zero point. Ropes will be attached to suitable structural anchor points on upper level. Using Wire Anchor Strops – EN795 Class B.	Sketch Attached	Yes Attachment B
Safe Rescue Plan	**Rescue Plan for Rope Access Technicians in vertical shaft:** **Rescue ropes for vertical part of pressure shaft will be pre-installed and attached to 3:1 hauling system and back up before any rope access technicians start descent down to the shaft.** In case of emergency: assess situation, then on discretion of rescue supervisor any of rope access technicians closer to casualty, above or below, descent or ascent to casualty, connect to casualty chest D-ring two rescue ropes, then supervisor using 3:1 hauling system take tension from main ropes, the rescuer can disconnect casualty devises from main rope and back up ropes. Then rescue supervisor will lift casualty up and, rescuer will ascend up to supervise lift, and keep casualty away from any objects till he will be back to the access floor/zero point. Details of 3:1 hauling system in attachment. Rescue kit will be located at the entrance hatch door. First aid can then be administered in a safe environment. Emergency numbers is 999 or 112	Sketch Attached	Yes Attachment C

	Rescue Plan for Rope Access Technicians in sloping shaft at ropes rigging/de-rigging stage: In case of emergency: assess situation, then on discretion of rescue supervisor, two of rope access technicians (one from sloping shaft one from intake gate stand by) descent, or descent and ascent to casualty. One of rescuers changeover to ascent mode, then connect casualty chest D-ring to himself, another rescuer connect to first rescuer bottom D-Ring 50m rope then move 40-50m up and rig 3:1 system to help pull casualty up to the pressure shaft bend. Re-install pulling system required amount of times. Then connect two rescue ropes from vertical pressure shaft to casualty chest D-rind. Then rescue supervisor will lift casualty up and, rescuer will ascend up to supervise lift, and keep casualty away from any objects till he will be back to the access floor/zero point. Details of 3:1 hauling system in attachment. Rescue kit will be located at the entrance hatch door. First aid can then be administered in a safe environment. Emergency numbers is 999 or 112 **Rescue Plan for Rope Access Technicians in sloping shaft at ropes inspection stage:** In case of emergency: assess situation, then on discretion of rescue supervisor, one of rope access technicians (one from sloping shaft or one from intake gate stand by) descent, or ascent to casualty. Then rescuer changeover to descent mode, then connect casualty chest D-ring to himself, and descent down with casualty to the manifold. First aid can then be administered in a safe environment. Emergency numbers is 999 or 112		
Flexibility	This method statement is a procedure how work should be carries out. It is the suggested framework and sequence of the tasks necessary to complete the work. The person in charge of work on site, IRATA Level 3 supervisor, would have sufficient latitude and flexibility to modify this method statement on the bases of their competence and experience if safer or lower risk approaches are indentified. All changes to this method statement are to be identified in the daily tool box talk based risk assessment.		
Emergency Equipment	First Aid Kit. Rescue kit: 2 x 100m Semi-Static Ropes – Beal EN1891 Class A; 1 x 50m Semi-Static Ropes – Beal EN1891 Class A, 2 x Ascenders Handled (Left) – Petzl EN567, 4 x Rescue Pulleys Fixe – Petzl EN12278, 1 x Descender Stop - Petzl EN341 class A, 6 x Karabiners Oval Screw lock Oxan - Petzl EN362, 6 x Sewn webbing sling – Lyon EN795B, Rope protectors.		
Emergency Communication	Verbal/Two way radios.		

Vlad Melnicov –

John Loyd –

Brendan Ball –

Robert Smith –

Attachment A
Basic Rope Access Maneuvers using Rope Access Equipment