

Adani

Appendix C2 – WHS Conceptual Risk Register



Abbott Point T0 Expansion: WHS Conceptual Risk Register

Reference	Risk	Applicable Project Phase	Description and Impacts	Consequence	Likelihood	Risk Level	Actions and Controls	Applicable Legal and Other Requirements
1	Infrastructure							
1.1	Malfunction of plant and equipment	Design / Construction / Commissioning / Decommissioning	(a) Fatality and injury (b) Equipment damage (c) production loss (d) Reputational Damage		D	P 22	<ol style="list-style-type: none"> (1) Implement plant and equipment Maintenance Plans (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for EPCM (5) Designed to the appropriate legal requirements and Australian Standards (6) Trained and competent personnel designing and installing equipment. (7) General WHS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work) 	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418.1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
1.2	Inadequate Infrastructure	Design / Construction	(a) Fatality and injury (b) Equipment damage (c) production loss		D	P 22	<ol style="list-style-type: none"> (1) Implement plant and equipment Maintenance Plans (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for EPCM (5) Designed to the appropriate legal requirements and Australian Standards (6) Trained and competent personnel designing and installing equipment. (7) General WHS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work) 	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418.1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
2	Vehicle Operation							

2.1	Site traffic	Construction / Commissioning / Decommissioning	(a) Fatality and injury (b) Equipment damage	D P	22	<p>(1) Implement a site-based Traffic Management Plan</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program for EPCM</p> <p>(6) Trained and competent personnel operating mobile plant</p> <p>(7) Implement Journey Management standards and procedures</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
2.2	Travel	Construction / Commissioning / Decommissioning	Injury and incident due to (a) vehicle interaction (b) navigation errors (c) bad weather (d) poor road conditions.	D P	22	<p>(1) Implement a site-based Traffic Management Plan</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program for EPCM</p> <p>(6) Trained and competent personnel operating mobile plant</p> <p>(7) Implement Journey Management standards and procedures</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
2.3	Essential equipment and other critical consumables unavailable.	Construction / Commissioning / Decommissioning	Impacts on worker health and safety and safe operation of plant and equipment	D U	19	<p>(1) Identify critical spares, consumables and other supplies and maintain stocks and supply chain management to ensure consistent availability</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program for EPCM</p> <p>(6) Trained and competent personnel operating mobile plant</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
2.4	Uncontrolled movement of vehicle or mobile plant	Construction / Commissioning / Decommissioning	(a) Fatality and injury (b) Equipment damage	D P	22	<p>(1) Implement a site-based Traffic Management Plan</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program for EPCM</p> <p>(6) Trained and competent personnel operating mobile plant</p> <p>(7) Implement Journey Management standards and procedures</p> <p>(8) Implement standards and procedures Isolation and Tagging</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
2.5	Heavy equipment and light vehicle interaction	Construction / Commissioning / Decommissioning	(a) Fatality and injury (b) Equipment damage	D P	22	<p>(1) Implement a site-based Traffic Management Plan</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program for EPCM</p> <p>(6) Trained and competent personnel operating mobile plant</p> <p>(7) Implement Journey Management standards and procedures</p> <p>(8) Equip certain mobile plant with beacons and audible alarms during movement</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches

2.6	Vehicle and person interaction	Construction / Commissioning / Decommissioning	(a) Fatality and injury	D P	22	<p>(1) Designate vehicle parking areas</p> <p>(2) Identify pedestrian access ways</p> <p>(3) All persons to wear high visibility clothing</p> <p>(4) Implement a site-based Traffic Management Plan</p> <p>(5) Implement mobile plant and equipment Maintenance Plans</p> <p>(6) Implement pre-start standards and procedures</p> <p>(7) Plant Risk Assessments and associated controls</p> <p>(8) Inspection and Audit Program for EPCM</p> <p>(9) Trained and competent personnel operating mobile plant</p> <p>(10) Equip certain mobile plant with beacons and audible alarms during movement</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
3	Security						
3.1	Insufficient security for site assets and equipment	Construction / Commissioning / Decommissioning	(a) Damage to plant and equipment	S U	9	<p>(1) Align with existing Abbot Point Port Operations Security plans.</p> <p>(2) Implement Project Security Plan</p> <p>(3) Ensure all personnel are introduced to the security rules during site and project inductions.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
3.2	Personal security of workers threatened during operations or in transit to site	Construction / Commissioning / Decommissioning	(a) Injury to workers (b) Reputation Damage	S U	9	<p>(1) Align with existing Abbot Point Port Operations Security plans.</p> <p>(2) Implement Project Security Plan</p> <p>(3) Ensure all personnel are introduced to the security rules during site and project inductions.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
3.3	Unauthorised access to work areas	Construction / Commissioning / Decommissioning	(a) Injury to workers (b) Damage to plant and equipment (c) Injury to the community	S P	18	<p>(1) Restrict site access by using barricades</p> <p>(2) Fencing and security passes required for project access</p> <p>(3) Security Guards stationed throughout Abbot Point Port Operations.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
4	Operation						
4.1	Insufficient availability of skills and resources	Operations	(a) Injury from operation of plant and equipment (b) work completion schedules	S L	21	<p>(1) Implement the Abbot Point Port Operations WHS Policies and procedures</p> <p>(2) Trained and competent personnel completing high risk tasks</p> <p>(3) Assessment of working conditions to occur as part of WHS Risk Register.</p> <p>(4) Internal Inspection and Audit Program to ensure staff are meeting standards.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules

4.2	Uncontrolled release of energy	Operations	(a) Fatalities and injuries (b) Equipment damage	D P	22	<p>(1) Implement a site-based Traffic Management Plan</p> <p>(2) Implement mobile plant and equipment Maintenance Plans</p> <p>(3) Implement pre-start standards and procedures</p> <p>(4) Plant Risk Assessments and associated controls</p> <p>(5) Inspection and Audit Program</p> <p>(6) Trained and competent personnel operating mobile plant</p> <p>(7) Implement Journey Management standards and procedures</p> <p>(8) Implement standards and procedures isolation and Tagging</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418:1: 2002 Cranes, Hoists and winches
4.3	Hydrocarbon or chemical spill / mis-management	Operations	(a) Potential fire (b) Inhalation, burn or injection from hazardous substances	D P	22	<p>(1) Implement standards and procedures in relation to chemical Handling</p> <p>(2) Incorporate Hydrocarbon Handling into inductions</p> <p>(3) Implement awareness programs in relation to Hydrocarbon Handling</p> <p>(4) Implement smoking policies</p> <p>(5) provide fire fighting equipment</p> <p>(6) Implement emergency response procedures and training</p>	<p>Legislation</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) <p>Codes of Practice :</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Plant Code of Practice (2005) <p>Leading practice standards:</p> <ul style="list-style-type: none"> • AS/NZ 1940 2009 Flammable and Combustible Liquids
4.4	Unskilled or incompetent workers	Operations	(a) Fatalities and injuries (b) Equipment damage	S L	21	<p>(1) Implement the Abbot Point Port Operations WHS Policies and procedures</p> <p>(2) Trained and competent personnel completing high risk tasks</p> <p>(3) Assessment of working conditions to occur as part of WHS Risk Register.</p> <p>(4) Internal Inspection and Audit Program to ensure staff are meeting standards.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418:1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
4.7	Working at heights	Operations	(a) Fatalities and injuries (b) Equipment damage	S L	21	<p>(1) Implement Working at Heights standards and procedures</p> <p>(2) Ensure equipment design meets legislation and task</p> <p>(3) Provide training and ensure competency</p> <p>(4) Provide PPE</p> <p>(5) Implement a permit system for working at heights</p> <p>(6) Implement rescue plan prior to commencing working at height tasks</p> <p>(7) Implement a equipment inspection register</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Tilt-up and Pre-cast Construction Code of Practice (2003); and • Tower Crane Code of Practice (2006). <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418:1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules

4.8	Incorrect handling of electrical equipment	Operations	(a) Fatality and injury due to electrical shock (b) Electrical fire (c) Property damage	D	24	(1) Ensure worker competency (2) Implement standards and procedures for purchasing and using electrical equipment (3) Implement plant and equipment Maintenance Plans (4) Implement pre-start standards and procedures (5) Plant Risk Assessments and associated controls (6) Inspection and Audit Program (7) Designed to the appropriate legal requirements and Australian Standards (8) Trained and competent personnel designing and installing equipment. (9) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work)	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 3000 2007 Wiring Rules
4.10	Chemical storage, handling and transport	Operations	(a) Incident and accident related to chemicals (b) Injuries (c) Property damage	D	22	(1) Implement a register of chemicals used or stored on site including relevant MSDS (2) Implement standards and procedures for purchase, use, storage and transport of chemicals	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice :</p> <ul style="list-style-type: none"> Confined Spaces (2011) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005) <p>Leading practice standards:</p> <ul style="list-style-type: none"> AS/NZ 1940 2009 Flammable and Combustible Liquids
4.11	Mobile equipment interaction	Operations	(a) Incidents and injuries (b) Equipment damage (c) Loss of production	D	22	(1) Implement a site-based Traffic Management Plan (2) Implement mobile plant and equipment Maintenance Plans (3) Implement pre-start standards and procedures (4) Plant Risk Assessments and associated controls (5) Inspection and Audit Program for operations (6) Trained and competent personnel operating mobile plant (7) Implement Journey Management standards and procedures (8) Equip certain mobile plant with beacons and audible alarms during movement	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
4.12	Excavation tasks	Operations	(a) Fatalities and injuries (b) Equipment damage (c) Production loss	D	22	(1) Implement an excavation permit system (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for excavation contractors (5) Trained and competent personnel operating mobile plant (6) Equip certain mobile plant with beacons and audible alarms during movement	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
4.13	Inclement weather	Operations	(a) Incidents and injuries (b) Equipment damage (c) Loss of production	D	22	(1) Implement standards and procedures for loading / unloading marine craft (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for excavation contractors (5) Trained and competent personnel operating mobile plant (6) Equip certain mobile plant with beacons and audible alarms during movement (7) Monitor weather conditions	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches

4.14	Incorrect operation of cranes and lifting equipment	Operations	(a) Fatalities and injuries (b) Equipment damage					<p>(1) Implement standards and procedures for selection and use of lifting equipment (2) Provide training and assessment in operation of lifting equipment (3) Implement plant and equipment Maintenance Plans (4) Implement pre-start standards and procedures (5) Plant Risk Assessments and associated controls (6) Inspection and Audit Program (7) General WHS MS operational controls (addressing work at heights, machinery isolation)</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418.1: 2002 Cranes, Hoists and Winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
4.15	Excessive noise and vibration	Operations	Impact on health and safety of (a) workers (b) the community	S	L	17		<p>(1) Implement standards and procedures in relation to Noise and Vibration (2) Provide appropriate PPE (3) Implement noise and vibration workplace assessment programs (4) Conduct health assessments periodically. (5) Implement plant and equipment Maintenance Plans (6) Implement pre-start standards and procedures (7) Plant Risk Assessments and associated controls (8) Inspection and Audit Program</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Plant Code of Practice (2005)
4.16	Airborne dust	Operations	(a) Health of workers (b) Health of community (c) Legal obligations	Si	L	17		<p>(1) Implement standards and procedures for Dust Monitoring and Control (2) Provide appropriate PPE (3) Conduct health assessments periodically. (4) Implement plant and equipment Maintenance Plans (5) Implement pre-start standards and procedures (6) Plant Risk Assessments and associated controls (7) Inspection and Audit Program</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Plant Code of Practice (2005)
4.17	Hot climatic conditions	Operations	(a) heat stress related illnesses (b) reduced productivity	Si	L	17		<p>(1) Implement standards and procedures in relation to working in hot conditions (2) Implement awareness and training in relation to heat related illnesses (3) Implement standards and procedures for heat stress Monitoring and Control (2) Provide appropriate PPE (3) Conduct health assessments periodically. (4) Implement plant and equipment Maintenance Plans (5) Implement pre-start standards and procedures (6) Plant Risk Assessments and associated controls (7) Inspection and Audit Program</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Plant Code of Practice (2005)

4.18	Falling objects	Operations	(a) Fatalities and injuries (b) Equipment damage	D P 22	<p>(1) Implement standards and procedures for selection and use of lifting equipment</p> <p>(2) Provide training and assessment in operation of lifting equipment</p> <p>(3) Implement plant and equipment Maintenance Plans</p> <p>(4) Implement pre-start standards and procedures</p> <p>(5) Plant Risk Assessments and associated controls</p> <p>(6) Inspection and Audit Program</p> <p>(7) General WHS MS operational controls (addressing work at heights, machinery isolation)</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418.1: 2002 Cranes, Hoists and Winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules
4.19	Contact with hazardous substance	Operations	Fatality and injury	D P 22	<p>(1) Implement hazardous Material Handling standards and procedure</p> <p>(2) Incorporate Hazardous Substances in site induction</p> <p>(3) Implement on-going awareness programs</p> <p>(4) Maintain a register of hazardous substances on site and the respective MSDS</p> <p>(5) Ensure worker competency</p> <p>(6) Implement standards and procedures for purchasing and using electrical equipment</p> <p>(7) Implement plant and equipment Maintenance Plans</p> <p>(8) Implement pre-start standards and procedures</p> <p>(9) Plant Risk Assessments and associated controls</p> <p>(10) Inspection and Audit Program</p> <p>(11) Trained and competent personnel (designing and installing equipment.</p>	<p>Legislation</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005) <p>Leading practice standards:</p> <ul style="list-style-type: none"> AS/NZ 1940 2009 Flammable and Combustible Liquids
4.20	Incident or injury related to hot work	Operations	(a) Fatalities and injuries (b) Property damage (c) Fire	S P 18	<p>(1) Implement Hot Work standards and procedure (2) Incorporate Hot Works in site induction (3) Ensure competency of persons conducting Hot Work (4) Implement permitting system</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005)
4.21	Slips, trips and falls	Operations	(a) Incident and injury	Si L 17	<p>(1) Implement Housekeeping standards and procedures</p> <p>(2) Incorporate Housework in site induction</p> <p>(3) Implement awareness programs in relation to housekeeping</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005)

4.22	Work in confined space	Operations	<p>Fatality and injury due to</p> <ul style="list-style-type: none"> (a) engulfment (b) explosive atmospheres (c) heat stress related illnesses (d) restricted access / egress (e) oxygen deficient or enriched atmospheres 	<p>D P 22</p>
4.23	Equipment modification	Operations	<p>(a) Fatalities and injuries (b) Equipment damage</p>	<p>D P 22</p>
4.24	Utilising high pressure systems	Operations	<p>(a) Fatalities and injuries (b) Equipment damage</p>	<p>D P 22</p>

Legislation:

- Workplace Health and Safety Act and Regulations (2011)
- Disaster Management Act QLD (1991)
- Ambulance Service Act QLD (1990)
- Fire and Rescue Service Act QLD (1990)
- Maritime Safety Queensland Act (2002)

Codes of Practice:

- Confined Spaces (2011)
- Formwork (2006)
- Hazardous Chemicals (2003)
- How to Manage Health and Safety Risks (2011)
- Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011)
- Managing the Work Environment and Facilities Code of Practice (2011)
- Mobile Crane Code of Practice (2006)
- Plant Code of Practice (2005)
- Steel Construction Code of Practice (2004)
- Tilt-up and Pre-cast Construction Code of Practice (2003)
- Tower Crane Code of Practice (2006); and
- Traffic Management for Construction or Maintenance Work Code of Practice (2008)

Other leading practice standards

- AS/NZ 2550.1: 2002 Cranes, Hoists and winches
- AS/NZ 1418.1: 2002 Cranes, Hoists and Winches – Safe Use – General Requirements
- AS/NZ 3000 2007 Wiring Rules

Legislation:

- Workplace Health and Safety Act and Regulations (2011)
- Disaster Management Act QLD (1991)
- Ambulance Service Act QLD (1990)
- Fire and Rescue Service Act QLD (1990)
- Maritime Safety Queensland Act (2002)

Codes of Practice:

- Confined Spaces (2011)
- Formwork (2006)
- Hazardous Chemicals (2003)
- How to Manage Health and Safety Risks (2011)
- Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011)
- Managing the Work Environment and Facilities Code of Practice (2011)
- Mobile Crane Code of Practice (2006)
- Plant Code of Practice (2005)
- Steel Construction Code of Practice (2004)
- Tilt-up and Pre-cast Construction Code of Practice (2003)
- Tower Crane Code of Practice (2006); and
- Traffic Management for Construction or Maintenance Work Code of Practice (2008)

Other leading practice standards

- AS/NZ 1418.1: 2002 Cranes, Hoists and winches
- AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements
- AS/NZ 3000 2007 Wiring Rules

Legislation:

- Workplace Health and Safety Act and Regulations (2011)
- Disaster Management Act QLD (1991)
- Ambulance Service Act QLD (1990)
- Fire and Rescue Service Act QLD (1990)
- Maritime Safety Queensland Act (2002)

Codes of Practice:

- Confined Spaces (2011)
- Formwork (2006)
- Hazardous Chemicals (2003)
- How to Manage Health and Safety Risks (2011)
- Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011)
- Managing the Work Environment and Facilities Code of Practice (2011)
- Mobile Crane Code of Practice (2006)
- Plant Code of Practice (2005)
- Steel Construction Code of Practice (2004)
- Tilt-up and Pre-cast Construction Code of Practice (2003)
- Tower Crane Code of Practice (2006); and
- Traffic Management for Construction or Maintenance Work Code of Practice (2008)

Other leading practice standards

- AS/NZ 1418.1: 2002 Cranes, Hoists and winches
- AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements
- AS/NZ 3000 2007 Wiring Rules

(1) Implement Confined Space standards and procedures
(2) Ensure equipment design meets legislation and task
(3) Provide training and ensure competency
(4) Provide PPE
(5) Implement a permit system for confined space work
(6) Conduct atmospheric monitoring
(7) Provide 'watcher' outside the confined space for the full duration of the task

(1) Implement plant and equipment Maintenance Plans
(2) Implement pre-start standards and procedures
(3) Plant Risk Assessments and associated controls
(4) Inspection and Audit Program
(5) Designed to the appropriate legal requirements and Australian Standards
(6) Trained and competent personnel designing and installing equipment.
(7) General WHS MS operational controls (addressing change management, work at heights, machinery isolation, confined spaces, hot work, diving work)

(1) Implement standards and procedures for working with the high pressure system
(2) Ensure equipment design meets legislation and task
(3) Provide training and ensure competency
(4) Provide PPE
(5) Implement a permit system for high pressure work
(6) Implement plant and equipment Maintenance Plans
(7) Implement pre-start standards and procedures
(8) Plant Risk Assessments and associated controls
(9) Inspection and Audit Program
(10) Designed to the appropriate legal requirements and Australian Standards

4.25	Use of power tools	Operations	(a) Fatalities and injuries (b) Equipment damage	D L 24	<p>(1) Conduct a risk assessment in relation to electrical installations</p> <p>(2) Install RCD protection on all power tools</p> <p>(3) Only qualified and competent persons permitted to undertake electrical work</p> <p>(4) Extension leads to be suspended or mechanically protected</p> <p>(5) Electrical isolation procedure (refer to 2.4)</p> <p>(6) All temporary electrical supplies to be installed as per AS3012</p> <p>(7) Implement plant and equipment Maintenance Plans</p> <p>(8) Implement pre-start standards and procedures</p> <p>(9) Plant Risk Assessments and associated controls</p> <p>(10) Inspection and Audit Program</p> <p>(11) Designed to the appropriate legal requirements and Australian Standards</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 3000 2007 Wiring Rules
4.26	Suspended loads	Operations	(a) Fatalities and injuries (b) Equipment damage (c) Production loss	D P 22	<p>(1) Implement standards and procedures for selection and use of lifting equipment</p> <p>(2) provide training and assessment in operation of lifting equipment</p> <p>(3) Implement plant and equipment Maintenance Plans</p> <p>(4) Implement pre-start standards and procedures</p> <p>(5) Plant Risk Assessments and associated controls</p> <p>(6) Inspection and Audit Program</p> <p>(7) General WHS MS operational controls (addressing work at heights, machinery isolation)</p> <p>(8) Barricade lifting zones</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418.1: 2002 Cranes, Hoists and winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules
4.27	Electrical malfunction	Operations	(a) Fatalities and injuries (b) Equipment damage (c) Production loss	D L 24	<p>(1) Conduct a risk assessment in relation to electrical installations</p> <p>(2) Install RCD protection on all power tools</p> <p>(3) Only qualified and competent persons permitted to undertake electrical work</p> <p>(4) Extension leads to be suspended or mechanically protected</p> <p>(5) Electrical isolation procedure (refer to 2.4)</p> <p>(6) All temporary electrical supplies to be installed as per AS3012</p> <p>(7) Implement plant and equipment Maintenance Plans</p> <p>(8) Implement pre-start standards and procedures</p> <p>(9) Plant Risk Assessments and associated controls</p> <p>(10) Inspection and Audit Program</p> <p>(11) Designed to the appropriate legal requirements and Australian Standards</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 3000 2007 Wiring Rules
4.28	Workers not fit to perform the task	Operations	(a) Fatalities and injuries (b) Equipment damage (c) Production loss	D P 22	<p>(1) Implement a Fitness For Work procedure</p> <p>(2) Implement pre-employment medicals</p> <p>(3) Conduct drug and alcohol screening</p> <p>(4) Implement an injury management procedure</p> <p>(5) Implement the Abbot Point Port Operations WHS Policies and procedures</p> <p>(6) Trained and competent personnel completing high risk tasks</p> <p>(7) Assessment of working conditions to occur as part of WHS Risk Register.</p> <p>(8) Internal Inspection and Audit Program to ensure staff are meeting standards.</p>	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418.1: 2002 Cranes, Hoists and winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules

4.29	Inadequate communication between crane operators and riggers	Operations	(a) Fatalities and injuries due to unpredicted movement of loads (b) Equipment damage (c) Production loss		D P 22	(1) Implement standards and procedures for selection and use of lifting equipment (2) Provide training and assessment in operation of lifting equipment (3) Implement plant and equipment Maintenance Plans (4) Implement pre-start standards and procedures (5) Plant Risk Assessments and associated controls (6) Inspection and Audit Program (7) General WHS MS operational controls (addressing work at heights, machinery isolation)	<ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 2550.1: 2002 Cranes, Hoists and Winches AS/NZ 3000 2007 Wiring Rules
4.31	Workers exposed to heavy lifting and manual handling tasks	Operations	(a) Crush, sprain, strain injuries (b) Production loss	4 B E5		(1) Implement Manual handling standards and procedures (2) Provide manual handling training (3) Include manual handling training in site induction (4) Implement manual handling awareness program (5) Provide appropriate PPE	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005)
4.32	Workers conducting high pressure / sand blasting tasks	Operations	(a) Fatalities and injuries (b) Property damage	S P 18		(1) Implement standards and procedures for high pressure tasks (2) Ensure competency of persons working with high pressure (3) Implement awareness programs for high pressure tasks and high pressure areas (4) Provide appropriate PPE (5) Implement standards and procedures for selection and use of equipment (6) Provide training and assessment in operation of equipment (7) Implement plant and equipment Maintenance Plans (8) Implement pre-start standards and procedures (9) Plant Risk Assessments and associated controls (10) Inspection and Audit Program (11) General WHS MS operational controls (addressing sand blasting)	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Plant Code of Practice (2005)
5	Contractor Management						
5.1	Contractors not capable of completing the task	Construction / Commissioning / Decommissioning	(a) production delays (b) accidents and incidents (c) damage to plant and equipment	S L 21		(1) Pre qualification process for sub-contractors administered by the EPCM. (2) Contractors engaged under contractual requirements (3) Periodic and regular progress meetings with key contractors.	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011)
5.2	Inadequate contractor communication	Construction / Commissioning / Decommissioning	(a) Production delays (b) accidents and incidents (c) damage to plant and equipment (d) Inadequate or incorrect product delivery	D P 22		(1) Pre qualification process for sub-contractors administered by the EPCM. (2) Periodic and regular progress meetings with key contractors.	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011)
5.3	Contractors not operating at the required safety standard	Construction / Commissioning / Decommissioning	(a) Fatality and injury (b) accidents and incidents (c) Damage to plant and equipment (d) Reputational	S L 21		(1) Implement a Contractor Management plan (2) Pre-qualify contractors (3) Implement a contractor safety induction (4) Provide adequate supervision	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011)
6	Design						

6.1	Inadequate design - infrastructure and utilities	Design	(a) Hazards to construction team resulting in injury and fatality					<p>(1) Implement plant and equipment Maintenance Plans</p> <p>(2) Implement pre-start standards and procedures</p> <p>(3) Plant Risk Assessments and associated controls</p> <p>(4) Inspection and Audit Program for EPCM</p> <p>(5) Designed to the appropriate legal requirements and Australian Standards</p> <p>(6) Trained and competent personnel designing and installing equipment.</p> <p>(7) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work)</p>	<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418:1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
6.2	Poor design of infrastructure, roads, sidings, laydown areas	Design	(a) Incidents and accidents due to interaction between vehicles or vehicles and pedestrians		D	P	22		<p>(1) Align with existing Abbot Point Port Operations Security plans.</p> <p>(2) Implement Project Security Plan</p> <p>(3) Ensure all personnel are introduced to the security rules during site and project inductions.</p>
7	Rail								<p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • How to Manage Health and Safety Risks (2011) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 1418:1: 2002 Cranes, Hoists and winches
7.1	Collision derailment	Construction / Commissioning / Decommissioning	(a) Fatalities and injuries (b) Property damage (c) Reputational (d) Production loss						<p>(1) Implement Rail Operation Plan</p> <p>(2) Implement Rail Operators Training Plan</p> <p>(3) Ensure competency of rail operators</p> <p>(4) Implement Emergency Response Plan</p> <p>(5) Provide emergency response training</p> <p>(6) Implement Traffic Management Plan</p> <p>(7) Ensure all personnel are introduced to all traffic rules during Project Induction.</p>
7.2	Equipment malfunction	Construction / Commissioning / Decommissioning	(a) Fatalities and injuries due to interaction of rail operations with vehicles, persons or mobile equipment (b) Property damage (c) Reputational		D	A	25		<p>(1) Implement a Rail Operations Maintenance Plan</p> <p>(2) Ensure maintenance is conducted by qualified and competent persons</p> <p>(3) Implement Emergency Response Plan</p> <p>(4) Provide emergency response training</p> <p>(5) Implement plant and equipment Maintenance Plans</p> <p>(6) Implement pre-start standards and procedures</p> <p>(7) Plant Risk Assessments and associated controls</p> <p>(8) Inspection and Audit Program for EPCM</p> <p>(9) Trained and competent personnel designing and installing equipment.</p> <p>(10) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work)</p>

7.3	Incorrect loading / unloading	Commissioning / Decommissioning	(a) Fatalities and injuries (b) Property damage (c) Production loss	D A	25	(1) Implement standards and procedures for loading and unloading rail equipment (2) Ensure loading / unloading is conducted by trained and competent persons (3) Implement a Rail Operations Maintenance Plan	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008)
8	Marine Operations						
8.1	Marine craft interactions	Construction / Commissioning / Decommissioning	(a) Fatalities and injuries (b) Property damage	D P	22	(1) Implement standards and procedures for marine operations (2) Ensure competency of persons working with marine craft and on marine operations (3) Provide appropriate PPE	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
8.2	Personnel working near water	Construction / Commissioning / Decommissioning	(a) Fatalities, injuries due to water related incidents	D U	19	(1) Implement standards and procedures for marine operations (2) Ensure competency of persons working with marine craft and on marine operations (3) Provide appropriate PPE (4) Include water related incidents and accidents in Emergency Response procedures and training programs	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> AS/NZ 1418:1: 2002 Cranes, Hoists and winches
8.3	Loading / unloading during difficult climatic conditions (wind, swell)	Construction / Commissioning / Decommissioning	(a) Fatalities and injuries (b) Property damage	D P	22	(1) Implement standards and procedures for loading / unloading marine craft (2) Monitor weather conditions	<p>Legislation:</p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) <p>Codes of Practice:</p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p>
9	Installation						

<p>9.1 Tools and equipment sub-standard or not suitable for the job</p>	<p>Construction / Commissioning / Decommissioning</p>	<p>(a) Fatalities and injuries (b) Property damage (c) Loss of production</p>	<p>S P 18</p>	<p>(1) Implement equipment register and ensure equipment complies with Australian Standards (2) Implement a Procurement Management Plan (3) Implement equipment Maintenance Plans (4) Implement pre-start standards and procedures (5) Plant Risk Assessments and associated controls (6) Inspection and Audit Program for EPCM (7) Tools and equipment designed to the appropriate legal requirements and Australian Standards (8) Trained and competent personnel designing and installing equipment. (9) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work)</p>	<p><u>Legislation:</u></p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p><u>Codes of Practice:</u></p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p><u>Other leading practice standards</u></p> <ul style="list-style-type: none"> AS/NZ 1418.1: 2002 Cranes, Hoists and Winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules
<p>9.2 Inadequate structural survey</p>	<p>Construction / Commissioning / Decommissioning</p>	<p>(a) Delays in obtaining approvals and permits (b) Serious incident (c) Loss of production (d) Reputational</p>	<p>D P 22</p>	<p>(1) Implement a Geotechnical Management Plan (2) Ensure surveys are conducted by appropriately qualified and competent persons (3) Conduct risk assessments in accordance with WHS Framework Plan.</p>	<p><u>Legislation:</u></p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p><u>Codes of Practice:</u></p> <ul style="list-style-type: none"> How to Manage Health and Safety Risks (2011) Managing the Work Environment and Facilities Code of Practice (2011)
<p>9.3 The new plant into existing plant with live components</p>	<p>Construction / Commissioning / Decommissioning</p>	<p>(a) Serious incident resulting in fatalities, injuries, environmental damage (b) property damage (c) Loss of production (d) Reputational</p>	<p>D L 24</p>	<p>(1) Conduct risk assessments in accordance with WHS Framework Plan. (2) Implement appropriate planning (3) Ensure all persons involved in this stage are appropriately qualified and competent</p>	<p><u>Legislation:</u></p> <ul style="list-style-type: none"> Workplace Health and Safety Act and Regulations (2011) Disaster Management Act QLD (1991) Ambulance Service Act QLD (1990) Fire and Rescue Service Act QLD (1990) Maritime Safety Queensland Act (2002) <p><u>Codes of Practice:</u></p> <ul style="list-style-type: none"> Confined Spaces (2011) Formwork (2006) Hazardous Chemicals (2003) How to Manage Health and Safety Risks (2011) Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) Managing the Work Environment and Facilities Code of Practice (2011) Mobile Crane Code of Practice (2006) Plant Code of Practice (2005) Steel Construction Code of Practice (2004) Tilt-up and Pre-cast Construction Code of Practice (2003) Tower Crane Code of Practice (2006); and Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p><u>Other leading practice standards</u></p> <ul style="list-style-type: none"> AS/NZ 1418.1: 2002 Cranes, Hoists and Winches AS/NZ 2550.1: 2002 Cranes Hoists and Winches – Safe Use – General Requirements AS/NZ 3000 2007 Wiring Rules
<p>10 Commissioning</p>					

10.1	Lack of adequate commissioning controls and handover	Commissioning / Decommissioning	<p>Impact on</p> <p>(a) competence of workers (b) plant and equipment working correctly (c) injury from inadequate safety controls</p>	S	L	17	<p>(1) Implement equipment register and ensure equipment complies with Australian Standards (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for EPCM (5) Tools and equipment designed to the appropriate legal requirements and Australian Standards (6) Trained and competent personnel designing and installing equipment. (7) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work) (8) Conduct Risk Register and review prior to commissioning and handover (9) Ensure competency of workers (10) Ensure WHS Committee oversees commissioning and handover process</p> <p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 2550.1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes, Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules
11	Decommissioning						
11.1	Legal non-compliance	Decommissioning	<p>(a) Substantial financial losses (b) Environmental impacts (c) Reputational</p>	S	L	17	<p>(1) Implement equipment register and ensure equipment complies with Australian Standards (2) Implement pre-start standards and procedures (3) Plant Risk Assessments and associated controls (4) Inspection and Audit Program for EPCM (5) Tools and equipment designed to the appropriate legal requirements and Australian Standards (6) Trained and competent personnel designing and installing equipment. (7) General WHS MS operational controls (addressing work at heights, machinery isolation, confined spaces, hot work, diving work) (8) Conduct Risk Register and review prior to commissioning and handover (9) Ensure competency of workers (10) Ensure WHS Committee oversees commissioning and handover process (11) Implement Closure and Restoration Plan</p> <p>Legislation:</p> <ul style="list-style-type: none"> • Workplace Health and Safety Act and Regulations (2011) • Disaster Management Act QLD (1991) • Ambulance Service Act QLD (1990) • Fire and Rescue Service Act QLD (1990) • Maritime Safety Queensland Act (2002) <p>Codes of Practice:</p> <ul style="list-style-type: none"> • Confined Spaces (2011) • Formwork (2006) • Hazardous Chemicals (2003) • How to Manage Health and Safety Risks (2011) • Managing Noise and Preventing Hearing Loss at Work Code of Practice (2011) • Managing the Work Environment and Facilities Code of Practice (2011) • Mobile Crane Code of Practice (2006) • Plant Code of Practice (2005) • Steel Construction Code of Practice (2004) • Tilt-up and Pre-cast Construction Code of Practice (2003) • Tower Crane Code of Practice (2006); and • Traffic Management for Construction or Maintenance Work Code of Practice (2008) <p>Other leading practice standards</p> <ul style="list-style-type: none"> • AS/NZ 2550.1: 2002 Cranes, Hoists and winches • AS/NZ 2550.1: 2002 Cranes, Hoists and Winches – Safe Use – General Requirements • AS/NZ 3000 2007 Wiring Rules