

The following tables present a partial list of known hazards and their effects for work in Telstra networks and customer premises. This list is not exhaustive, it is provided to assist contractors in identifying, assessing and developing controls during the development of a Health, Safety and Environment plan.

Table 1: Telstra Underground structures

Hazard type	Example	Effects
Plant	– Cable supporting structures – Access walkways – Fixed ladder systems – Hydraulic mechanisms – Fire detection and suppression systems – Electric and electronic equipment such as: – Telecommunications repeaters – Radio transmitters/receivers – Secondary batteries – Water pumps – Ventilation systems – Lighting systems – Cable pressurisation systems	Impact injuries from striking supporting structures. Electric shock, sprains, strains and other manual handling injuries, impacts, crushing, and lacerations. And noise induced hearing loss.
Electrical	– Underground cabling systems such as telecommunications and power	Electric shock, fire, burns, explosion.
Gravitational (people)	– Working at height within underground structures – Ladders – Slippery/uneven surfaces – Flooding of structure	Falls, slips, trips

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Human movement	- Manual Handling - lifting covers for pits, manholes etc - Limited access/egress to work area	Sprains, strains, handling injuries
Object (kinetic)	- Traffic & Pedestrian management - Vehicles - Optic fibre entering part of human body	Impacts, collisions, crashes, illness
Biological	- Sharps - Body fluids - Pests - Sewage - Contaminated water	Infections, diseases, stings, bites
Chemical	Pest extermination products, petroleum products, ground treatment products, unknown chemicals, gases, lack of oxygen, flooding	Effects from inhalation, ingestion, absorption or injection of chemicals
Security	Employee safety	Assault - verbal and/or physical Demands for cash or keys
Thermal	Environmental conditions (extreme heat or cold)	Hypothermia, heat stress
Gravitational (objects)	Falling debris, manhole cross-bars, pedestrian	Injury to persons
Radiation	- Working out doors - Laser light emitted from optical fibre cable	Burns, sickness, eyesight injury
Stored (pressure)	- Opening pits, manholes and other underground structures - Gas/water pipes - High pressure fluids used in hydraulic mechanisms - Cable pressurisation systems	Explosions, impacts, gas eruptions
Vibration	None Known	NA
Noise	Plant operating	Potential hearing damage

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Confined spaces	– Check the nature of possible contaminants and the possible route of escape.	
Working in Isolation	– Check location for required support staff	
Environmental	– Plant operating eg trenching/ploughing – Excavating near utilities (i.e. gas, water, sewerage) – Reinstatement – Pumping out manhole/excavations – Work involving ignition sources – All work in areas of environmental significance – Aboriginal/European cultural heritage issues – Decommissioning of equipment that may contain hazardous waste	Noise pollution, air pollution (dust, gas or exhaust emissions), resource usage, spread of environmental pests (eg weeds, fungus), introduction of weeds, soil contamination, aesthetic impact, erosion, pollution of waterways, waste disposal, site disturbance, habitat/fauna degradation, disruption of wildlife corridors.

Table 2: Telstra network equipment sites

Hazard type	Example	Effects
Plant	– Cable supporting structures – Lifting hoists – HVAC systems – Access walkways – Fixed ladder systems – Travelling ladder systems – Emergency Power Plant – AC and DC power distribution systems including Uninterruptible Power Supplies. – Secondary batteries – Hydraulic mechanisms – Fire detection and suppression systems – Electric and electronic equipment such as: telecommunications network equipment, radio transmitters/receivers, water pumps, ventilation systems, lighting systems	Impact injuries from striking supporting structures. Electric shock, sprains, strains and other manual handling injuries, impacts, crushing, and lacerations. And noise induced hearing loss.
Electrical	– AC and DC power distribution systems, power feeds on network cabling systems	Electric shock, fire, burns, explosion.
Gravitational (people)	– Working at height – Slippery/uneven surfaces	Falls, slips, trips
Human movement	– Manual Handling – Limited access/egress to work area.	Sprains, strains, handling injuries
Object (kinetic)	– Traffic & Pedestrian management – Vehicles – Optic fibre penetrating part of human body	Impacts, collisions, crashes, illness

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Biological	– Sharps – Body fluids – Pests – Sewage – Contaminated water – Airborne contaminates	Infections, diseases, stings, bites
Chemical	– Pest extermination products, petroleum products, battery electrolytes, ground treatment products, unknown chemicals, gases	Effects from inhalation, ingestion, absorption or injection of chemicals
Security	– Employee safety	Assault - verbal and/or physical Demands for cash or keys
Thermal	– Environmental conditions (extreme heat or cold)	Hypothermia, heat stress
Gravitational (objects)	– Falling debris	Injury to persons
Radiation	– Working out doors, Radio Frequency Radiation, Laser light	Burns, sickness, eyesight injury
Stored (pressure)	– Opening pits, manholes and other underground structures – Gas/water pipes – High pressure fluids used in hydraulic mechanisms – Cable pressurisation systems – HVAC systems	Explosions, impacts, gas eruptions
Vibration	None known	NA
Noise	– Plant operating	Potential hearing damage
Working in Isolation	– Check location for required support staff	

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Environmental	– Plant operating eg trenching/ploughing – Excavating near utilities (i.e. gas, water, sewerage) – Pumping out manhole/excavations – Decommissioning of equipment that may contain hazardous waste	Noise pollution, air pollution (dust and exhaust emissions), resource usage, pollution of waterways, waste disposal.

Table 3: Telstra aerial network

Hazard type	Example	Effects
Plant	– Elevated working platforms	Impact injuries from striking supporting structures. Electric shock, sprains, strains and other manual handling injuries, impacts, crushing, and lacerations. And noise induced hearing loss.
Electrical	– AC and DC power distribution systems – Coaxial cable TV network – Lightning strikes	Electric shock, fire, burns, explosion.
Gravitational (people)	– Working at height – Slippery/uneven surfaces – Ladders	Falls, slips, trips
Human movement	– Manual Handling – Limited access/egress to work area.	Sprains, strains, handling injuries
Object (kinetic)	None known	NA
Biological	– Sharps – Pests – Contaminated water – Airborne contaminates	Infections, diseases, stings, bites
Chemical	– Pest extermination products, petroleum products, ground treatment products, unknown chemicals	Effects from inhalation, ingestion, absorption or injection of chemicals
Security	– Employee safety	Assault - verbal and/or physical
Thermal	– Environmental conditions (extreme heat or cold)	Hypothermia, heat stress
Gravitational (objects)	– Falling debris, equipment, plant	Injury to persons
Radiation	– Working out doors, Radio Frequency Radiation, Laser light	Burns, sickness, eyesight injury
Stored (pressure)	None known	NA
Vibration	None known	NA

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Noise	– Plant operating	Potential hearing damage
Wildlife	– Birds or other animals nesting amongst structure	Injuries from being attacked by animals, habitat/fauna degradation
Working in Isolation	– Check location for required support staff	
Environmental	– Plant operating eg EWP – Reinstatement – Work involving ignition sources – All work in areas of environmental significance – Aboriginal/European cultural heritage issues – Decommissioning	Noise pollution, air pollution (dust and exhaust emissions), resource usage, spread of environmental pests (eg weeds, fungus), introduction of weeds, soil contamination, aesthetic impact, erosion, pollution of waterways, waste disposal, site disturbance, habitat/fauna degradation, disruption of wildlife corridors.

Table 4: Customer premises *(Note. Site induction required for commercial premises to identify hazards associated with the business as the examples listed below are for residential premises only).*

Hazard type	Example	Effects
Plant	None known	
Electrical	– Premises power cabling – Mains power connection to premises	Electric shock, fire, burns, explosion.
Gravitational (people)	– Working at height – Slippery/uneven surfaces – Ladders – Ceiling/roof unable to support person	Falls, slips, trips
Human movement	– Manual Handling – Limited access/egress to work area.	Sprains, strains, handling injuries
Object (kinetic)	– Traffic & Pedestrian management – Vehicles	Impacts, collisions, crashes
Biological	– Sharps – Body fluids – Pests – Sewage – Contaminated water – Airborne contaminates	Infections, diseases, stings, bites
Chemical	– Pest extermination products, petroleum products, battery electrolytes, ground treatment products, unknown chemicals	Effects from inhalation, ingestion, absorption or injection of chemicals
Security	– Employee safety	Assault - verbal and/or physical
Thermal	– Environmental conditions (extreme heat or cold)	Hypothermia, heat stress
Gravitational (objects)	– Falling debris, equipment, plant	Injury to persons

Known Hazards List for Telstra Networks and customer premises



Hazard type	Example	Effects
Radiation	– Radio Frequency Radiation, Laser light	Burns, sickness, eyesight injury
Stored (pressure)	– Opening pits, manholes and other underground structures – Gas/water pipes	Explosions, impacts, gas eruptions
Vibration	None known	NA
Noise	None known	NA
Lighting	– Low visibility in non-working or non-living areas	hazard identification diminished
Animals	– Dangerous domestic pets	Injuries from avoiding or being attacked
Working in Isolation	– Check location for required support staff	
Environmental	– Plant operating eg trenching/ploughing – Excavating near utilities (ie gas, water, sewerage) – Reinstatement – Pumping out manhole/excavations – Work involving ignition sources – All work in areas of environmental significance – Aboriginal/European cultural heritage issues – Decommissioning	Noise pollution, air pollution (dust, gas and exhaust emissions), resource usage, spread of environmental pests (eg weeds, fungus), introduction of weeds, soil contamination, aesthetic impact, erosion, pollution of waterways, waste disposal, site disturbance, habitat/fauna degradation, disruption of wildlife corridors.