



Risk

ST12 – Land Transportation Procedure

Purpose

- + To manage the risks to health and safety arising from the use of vehicles whilst undertaking Santos activities.

Scope

- + This procedure applies to vehicles and driving performed under Santos' influence and control.

CRITICAL REQUIREMENTS

- Drive vehicles that meet or exceed the minimum specification
- Be fit to drive: 0.0 BAC, not under the influence of drugs or medication, not fatigued
- Always wear a seat belt when vehicles are in motion
- Travel at speeds appropriate to the conditions
- Obey speed limits and don't exceed 80Km/hr on unsealed roads
- Do not attempt to overtake in dust or other situations of reduced visibility

Document control

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Contents

1	Requirements	3
1.1	Safe Driver and Journey	3
1.2	Safe Vehicle	4
1.2.1	Light Vehicles	4
1.2.2	Heavy Vehicles	4
1.2.3	Heavy Vehicles – Non Dangerous Bulk Liquid Loads	5
1.2.4	All-Terrain and Utility Vehicles	5
1.3	Vehicle Recovery	5
2	Key Terms.....	5
Appendix A	Santos Personnel and Embedded Contractors Light Vehicle Driver Training Requirements Flowchart.....	7
Appendix B	Santos Contractors Light Vehicle Driver Training Requirements Flowchart	8
Appendix C	Guide for Loading, Unloading Exclusion Zones (LUEZ)	9

1 Requirements

1.1 Safe Driver and Journey

1. Drivers must be competent and licenced (where applicable) in the class, type and configuration of the vehicle being driven.
2. Light vehicle drivers must meet applicable Santos SAFE-DRIVE training requirements. Refer to Appendix A and B.
3. Seat belts must be worn by all occupants, whenever a vehicle¹ is in motion, including reversing.
4. Drivers must travel at speeds appropriate to the conditions.
5. Speed limits must not be exceeded:
 - a. sealed roads – travel at speeds up to the sign posted speed limit
 - b. unsealed roads – 80km/h maximum, unless signposted lower
6. Drivers must be fit to drive and must:
 - a. have 0.00% blood alcohol concentration (BAC) / breath alcohol concentration (BrAC)
 - b. not be impaired from prohibited or illegal substances
 - c. not be impaired from medication that may cause drowsiness or dizziness
 - d. not be fatigued
7. Journeys must be planned for safe arrival considering fatigue management and emergency response requirements, including:
 - a. drivers of light vehicles should rest for 15 minutes after every two hours of driving
 - b. field operations must define and implement requirements for reporting and recording vehicle movements and actions to be taken when a traveller is recorded as overdue
8. Avoid driving between 10pm to 4am as far as practical to reduce driver fatigue. If driving during this period is unavoidable, approval must be obtained by a Level 4 manager prior to commencement.
9. Off-road driving must be approved by a Level 4 manager prior to commencement.
10. Water crossings must only be undertaken where there is no practicable alternative and the hazards have been assessed as safe to cross (e.g. consideration of crossing type, breadth/depth/flowrate of water, vehicle type/capability, potential for submerged obstacles or hollows/drop-offs).
11. Do not attempt to overtake a vehicle in dust or other situations of reduced visibility.
12. Cruise control must not be used when driving on unsealed roads or in wet conditions.
13. Drivers must stop in a safe location, prior to interacting with a mobile device². This includes making or receiving phone calls and sending/reading messages, regardless if 'hands free'.
14. All light vehicles must reverse park or use drive through parks (i.e. forwards facing on commencement of journey).

¹ Not mandatory in golf cart type vehicles

² Excludes oral communication using 2-way radios fitted to vehicles

15. A system must be established to monitor and feedback at risk driver behaviours.
 - a. In-vehicle monitoring systems (IVMS) and associated exception management requirements must be implemented where specified by Santos procedures or guidelines

1.2 Safe Vehicle

1. Vehicles must be:
 - a. inspected regularly (considering the type of vehicle, roads and journeys being undertaken) to check they are in a suitable condition to drive
 - b. maintained in keeping with manufacturer's guidance
2. A vehicle's safe loading limit, inclusive of passengers, must not be exceeded.
3. Loads must be restrained internally and externally to reduce the risk of vehicle instability from load shifting or injury from projectiles.
4. Loading and unloading exclusion zones (LUEZ) must be used at all times during loading/unloading activity associated with a vehicle. Refer to guidance in Appendix C.

1.2.1 Light Vehicles

1. Light vehicles must meet the following minimum safety specification:
 - a. anti-lock braking system
 - b. driver's side airbag
 - c. cargo barriers for station wagons
2. Light vehicles driven on field roads in remote locations must meet the following additional requirements:
 - a. four wheel drive for off-road driving
 - b. headlights on permanently
 - c. vehicle identification decals
 - d. UHF radio, or digital equivalent
 - e. dune pole fitted to vehicle where travel on narrow roads with crests is required
3. Fleet management approval must be obtained prior to any light vehicle modifications, or equipment additions, using non-original equipment manufacturer (non-OEM) products.

1.2.2 Heavy Vehicles

1. All heavy vehicles must meet the following minimum safety specification:
 - a. first aid kit
 - b. fire extinguisher (dry powder type)
 - c. reflective triangles
 - d. reversing alarms
 - e. UHF radio, or digital equivalent

1.2.3 Heavy Vehicles – Non Dangerous Bulk Liquid Loads³

1. Heavy vehicles and trailers designed to carry non-dangerous bulk liquid (NDBL) loads must be sized and designed such that slosh is minimal.
2. NDBL tankers exceeding 25,000L capacity must have clearly defined fill marks on the tanker.

1.2.4 All-Terrain and Utility Vehicles

1. Quad bikes (or similar) must not be used⁴.
2. Other utility or side-by-side type vehicles (excluding golf cart type vehicles) must meet the following minimum safety specification⁴:
 - a. bench or bucket type seating with seat belts
 - b. steering wheel and foot operated brake and accelerator
 - c. roll-over protection
3. When using utility or side-by-side type vehicles:
 - a. Helmets approved under AS1698 *Protective helmets for vehicle users* must be worn:
 - i) at any location within a gazetted (legal) road or road-related area
 - ii) in other locations when travelling at speeds in excess of 20km/h
 - b. a radio or other means of communication must be carried

1.3 Vehicle Recovery

1. Only personnel competent to the requirements in SISODRV405A - Coordinate recovery of 4WD vehicles can perform light vehicle recovery.
2. Recovery personnel must:
 - a. undertake a documented risk assessment for each recovery
 - b. use only OEM-approved recovery points
 - c. use task-specific recovery equipment that meets or exceeds Australian Standards

2 Key Terms

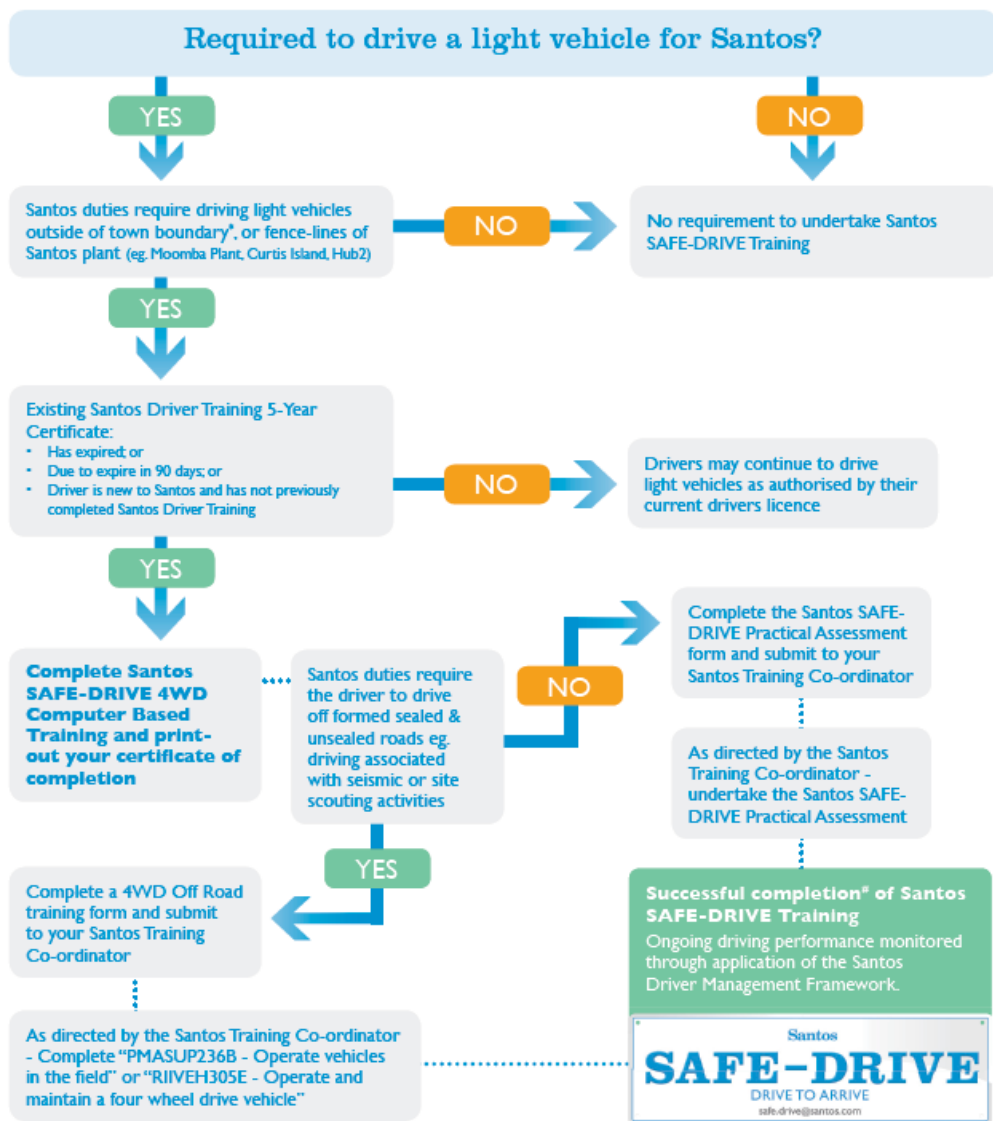
Term or acronym	Definition
Field road	A field road is any road or track within a Santos area of operations that may be a public or private road. The road or track may have a natural or bitumen (or similar) surface
Heavy vehicle	A vehicle with a gross vehicle mass GVM or aggregate trailer mass (ATM) of more than 4500kg, and/or a combination that includes a vehicle with a GVM or ATM of more than 4500kg.

³ Requirements for liquids that are Dangerous Goods (e.g. crude oil) are detailed in the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (ADG Code)

⁴ Transition arrangements are to be established by sites using quads bikes or utility vehicles that don't meet these specifications at the time of publishing

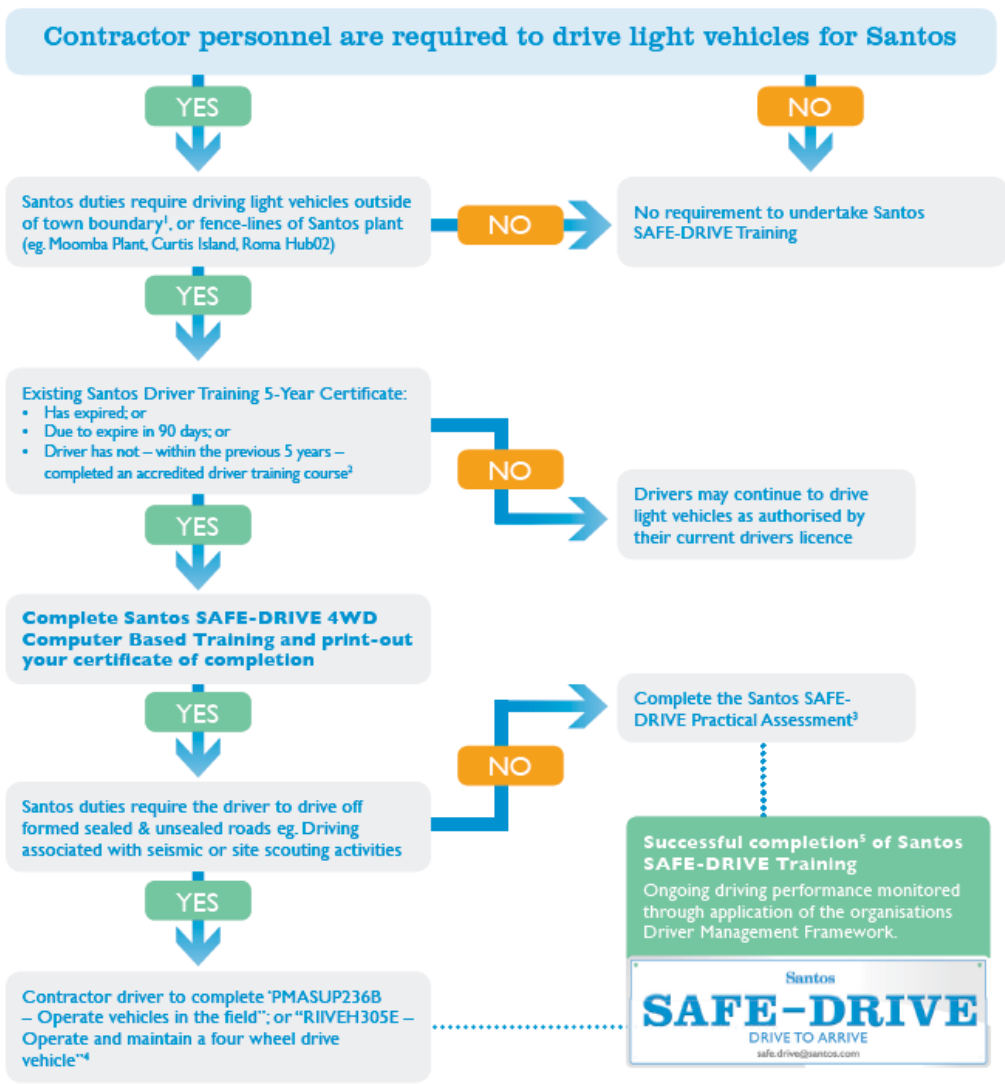
Term or acronym	Definition
Light vehicle	A vehicle with a gross vehicle mass (GVM) not more than 4500kg, not including motorbikes, quad bikes (e.g. other ATVs, including Polaris 6 wheelers), bicycles and tricycles.
Off-road	Driving associated with travel on unformed roads, including but not limited to, traversing pipeline easements, site scouting and seismic activities. Off road driving does not include formed unsealed roads leading to Santos assets/facilities (e.g. well pad access tracks).
Remote areas	Areas outside Santos operational facilities or urban areas with infrequent passing traffic, where communication and assistance would be unlikely to occur within 30 minutes of an incident or breakdown.

Light Vehicle (less than 4.5 tonnes) Driver Training Requirements – Santos Personnel & Embedded Contractors

LEGEND:
 *Town boundary - includes those areas approved by Level 3 Management eg. Route directly linking Narrabri & Narrabri Operations Centre and Roma and the Roma Logistics Hub.
 *Successful completion - requires drivers achieve positive confirmation of completing all relevant assessment components. Supervisors to be advised of any unsuccessful outcomes. Drivers subject of unsuccessful outcomes are not permitted to drive Santos vehicles.

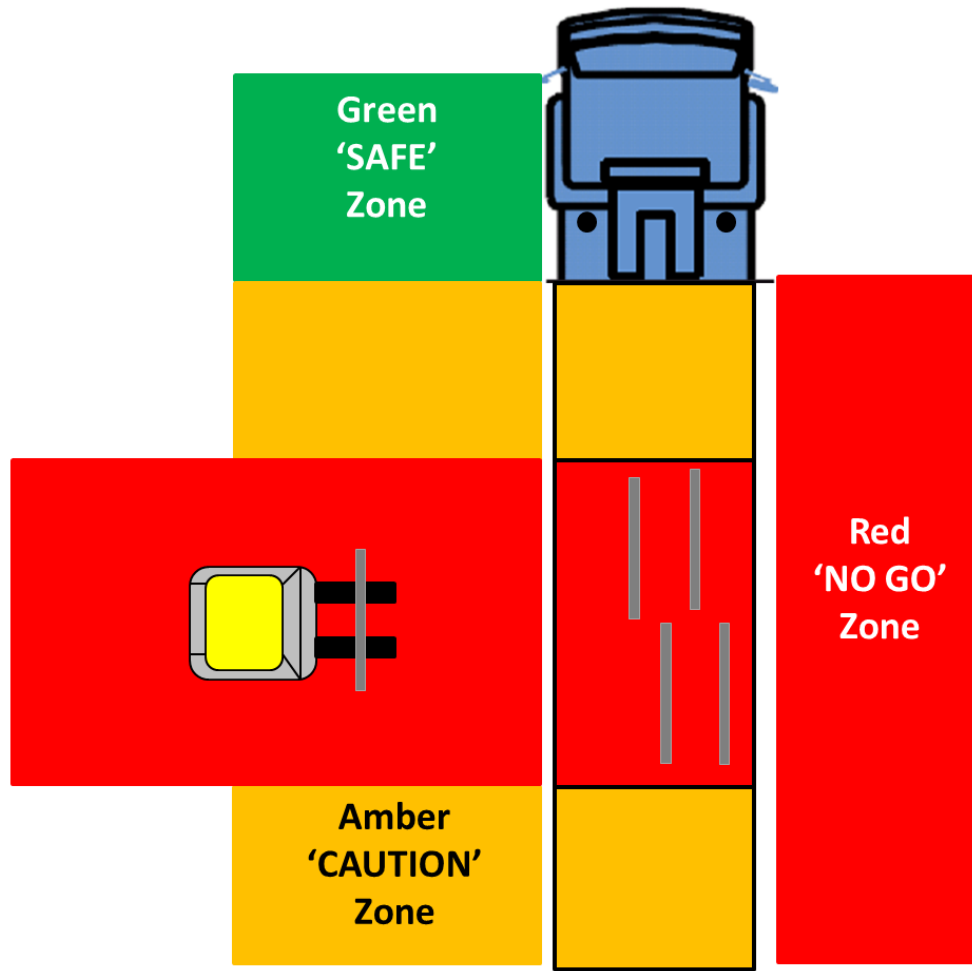
Light Vehicle (less than 4.5 tonnes) Driver Training Requirements – Santos Contractors

LEGEND:

- ¹ Town Boundary includes those areas approved by Santos Management eg. Routes directly linking Narrabri & Narrabri Operations Centre; and Roma and the Roma Logistics Hub.
- ² Santos recognises the following accredited off-road training courses delivered by a Registered Training Organisation - "PMASUP236B – Operate vehicles in the field"; or "RIIVEH305E – Operate and maintain a four wheel drive vehicle"
- ³ Some contractors may choose to continue to train their drivers in an ACCREDITED OFF-ROAD TRAINING course. If this is not required for Santos contracted activities, then this cost will not be borne by Santos. These drivers will still be required to complete the Santos CBT but NOT a 'SAFE-DRIVE' PRACTICAL ASSESSMENT.
- ⁴ Cost borne by Santos.
- ⁵ Successful completion - requires drivers achieve positive confirmation of completing all relevant assessment components. Supervisors to be advised of any unsuccessful outcomes. Drivers subject of unsuccessful outcomes are not permitted to drive vehicles at Santos field locations.

Loading/Unloading Exclusion Zone (LUEZ)



Green 'Safe' Zone

Persons in the vicinity of the load (excluding 'the loader') can see and be seen and are clear of potential falling or moving objects

Amber 'Caution' Zones

If persons (other than the loader) must be in these areas then extra care is required to allow for the increased risk. Persons must not go any closer than 3m from any moving load

Red 'No Go' Zones

This zone should be at least as wide as the height of the load above the ground. Persons are not allowed in the 'No Go' Zone during loading and unloading (including the driver securing loads) unless there is no alternative. Entry is only permitted after all movements have ceased and the loader has signalled it is safe to enter.