	ACACIA FOREST INDUSTRIES SDN BHD STANDARD OPERATING PROCEDURE OPERATIONS	Document No.: AFI/SUPP/05
		Date Issued : 01/03/2011
		Last Update: 09/05/2017
Section: SUPPLY CHAIN	Work Scope Area: FOREST COMPARTMENT AND ROADS	Revision No: 2
Activity: ROAD CONSTRUCTION, ROAD UPGRADING & MAINTENANCE		Responsible Person: Infrastructure Manager
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STANDARD OPERATING PROCEDURE

1.0 TITLE Road Upgrading and Maintenance by Bulldozer

2.0 OBJECTIVE

To enable safe and smooth log transportation on harvesting roads from the harvesting area to log yards.

3.0 PERSON IN CHARGE (PIC)

- This procedure applies to the Tractor/ Bulldozer operator.
- This procedure applies further to the Infrastructure Manager and Infrastructure Supervisors.

4.0 DEFINITIONS


- **Doze** - to pushes volume of soil in forward direction.
- **Cut soil** - to trim soil/hills by pushing the soil in forward direction.
- **Fill soil** - to fill in soil at depressions of the terrain to raise the surface level.

5.0 JUSTIFICATION AND SCOPE

For almost all road upgrading and maintenance works the use of bulldozers is required. This SOP shall assure work is carried out according to higher specifications and safety for everybody involved at all times.

- The Tractor/Dozer Operator shall ensure that there is no body near the Tractor/Dozer machine before start.
- The Tractor/Dozer Operator shall ensure that all controls and gauges respond correctly.
- The Tractor/Dozer Operator shall ensure that when parking the blade must be lowered.
- The Tractor/Dozer Operator shall ensure no unsupervised personnel climb on or sit on driver seat while the unit is operating or idling.

PREPARED BY:	APPROVED BY:
INFRA MANAGER	SUPPLY CHAIN MANAGER


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- The Tractor/Dozer Operator shall ensure and know the limitations and capabilities of the Tractor/Dozer.
- The Tractor/Dozer Operator shall ensure to keep an adequate distance from the edge of cliffs, overhangs and slide area.
- The Tractor/Dozer Operator shall ensure that there is no overcut of the hill slope to avoid soil earth collapsed.
- The Tractor/Dozer Operator shall ensure to keep the machine under control and do not extend it beyond the recommended capacity.
- Make sure other people are aware of the Tractor/Dozer approaching.
 - **Never push soil within or into rivers, creeks or any kind of water flow including lakes, ponds or swamps, mangroves, HCVF areas, river buffers, wild life protection areas/ corridors and also grave yards. This applies to any other features within the landscape which are protected or unique or special to this region such as remaining, solitary jungle trees, nesting trees...etc.**
 - **No unnecessary pushing/ damaging of trees or soil.**
 - **No unnecessary driving of the machine inside the plantation compartments to reduce soil compaction.**

6.0 PROCEDURE

- Safety
 - Mandatory
 - Operator gloves
 - Steel toe cap boots
 - Helmet
 - Optional
 - High visibility vest (If not wearing company T-shirt green & orange)
- Method/Operation guidelines
START UP
 - Know your machine.

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- Know how to operate all equipment on your machine.
- Know the purpose of all controls, gauge and Indicators.
- Sit in the driver seat and adjust the seat for proper driver control.
- Ensure that there is nobody under, on or near the machine before starting.
- Move all the controls to the hold position before starting.
- Ensure that all controls and gauges respond correctly.
- Final visual inspection that the area is clear of personnel or other people.
- Place the throttle to start/idle.
- Allow the engine to idle – listen for any unusual sounds or vibrations.
- The operator must ensure that while carrying out any oil check on the tractor, it is parked level, stable and the engine is not running.

PRE- OPERATION

- Identify danger to the tractor, “no-go” and other problem area.
- All hazardous or sensitive areas are to be identified and marked.

SHUT DOWN

- Park on a level ground.
- Lower all attachments to the ground to ensure that they are stable.
- Ensure all controls are in a neutral position.
- Check all gauges and instrumentation for correct readings.
- Check all instrumentation ensuring correctly shut down.
- The tractor must always be parked in a level and secure area.
- Park brake must be applied and the blade lowered to the ground.

7.0 RELATED DOCUMENTATION

- AFI/SUPP/11 Plantation Road Specification

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