

Definition

Internal Transfers are the movement of liquid cargo, fuels, lubricants, slops, dirty ballast, oily bilge water, or hydraulic fluids from one tank to another within the hull of the ship. Internal transfers most frequently involve petroleum products.

Internal transfers include movements from:

- Fuel tank to fuel tank;
- Bilge to holding tank;
- Fuel tank to service tank or settle tank;
- Cargo tank to cargo tank;
- Cargo tank to slops tank;
- Fuel and lube oil sludge to holding tank or incinerator waste oil tanks;
- Cylinder lube oil storage tank to cylinder lube oil day tank. Lube oil storage tanks to engine sumps; and
- Other lube oil transfers to auxiliary equipment.

Common Problems

Internal Transfers are often done routinely as an on-watch function or automatically and therefore may not be given the same level of care and attention as transfers of petroleum cargo or bunkers over the rail of the ship. Too frequently this results in a tank overflow and discharge. This following are problems that typically lead to a discharge or close-call during an internal transfer:

Planning

- No clear delegation of duties.
- Too many duty distractions. Lack of time dedicated exclusively to transfer.
- No plan or standard operating procedure for the transfer. Where possible, transfers should be conducted prior to arriving and during daylight hours.
- Miscommunication or misunderstanding about which tanks are to be filled or emptied.
- Unqualified or untrained personnel assigned to the task with little or no supervision.
- Misjudging the receiving tank capacity or supply tank liquid volume.

WHY IT MATTERS

Internal Transfers are often done routinely as an on-watch function or automatically and therefore may not be given the same level of care and attention as transfers of petroleum cargo or bunkers over the rail of the ship. Too frequently this results in a tank overflow and discharge.

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Special accommodations:

If you need this publication in an alternate format, call the Spills Program at 360-407-7455. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Execution

- Insufficient personnel.
- Inadequate tank level gauging during transfer.
- Insufficient supervision of transfer by the person in charge.
- Valve misalignment.
- Miscommunication between watch standers or watches.
- Transfer rate underestimated or undetermined.

Follow-up

No documentation that the transfer occurred, or transfer volume recorded incorrectly.

Precautions

The best general precaution against internal transfer spills is to treat them with the same level of care and respect given other over-the-rail liquid cargo or bunker fuel transfers.

The following is a suggested checklist for internal transfers. It is a good idea to create a checklist for any transfer of oil, oil product, or oil-tainted water. Such checklists may be combined, and the person in charge may use sections that apply to the type of transfer being conducted.

INTERNAL TRANSFER CHECKLIST

TIME COMPLETED	BEFORE TRANSFER	INITIALS
	Transfer plan completed by person in charge (PIC). Dedicated transfer team selected from crew.	
	Qualified crew assigned transfer duties, including deck rover watch. On-coming watch standers assigned duties.	
	Training session conducted for crew members with transfer duties. Supervisor assigned to new crew members.	
	Piping diagrams and checklists posted and provided as needed.	
	Procedures for watch change discussed.	
	Valve and vent systems aligned and checked by PIC.	
	Emergency shutdown and response procedures discussed.	
	Transfer, communication, and level alarm systems tested.	
	Ullages/tank levels checked, re-checked, and recorded	
	Pollution prevention equipment in place (scupper plugs, etc.).	
	Other departments notified of transfer.	

DURING TRANSFER		
	Changes to tank and valve alignment verified and approved by PIC.	
	Transfer started at low flow rate.	
	Flow rates, pressures, and tank levels monitored and checked against plan.	
	Periodic communication checks made.	
	Flow rate slowed when topping off tank(s).	
	Transfer completed.	
AFTER TRANSFER		
	Valves and vent system set. Inert gas integrity maintained.	
	Re-checked and logged final tank levels in Engine Room Log, Sounding Log, and/or Oil Record Book. Levels compared with transfer plan.	
	Secured from transfer operation. Other departments notified.	