



# **Selecting Quality Tankers for the Newfoundland Transshipment Limited Whiffen Head Terminal**



## Whiffen Head Terminal in Placentia Bay





## **NTL Mission Statement:**

*“We provide safe, environmentally responsible, efficient and cost effective transshipment services at our Whiffen Head terminal thereby assisting our customers to reach their markets at the lowest cost.”*



## **Facility Description:**

- **Loading Piers:** 2 piers capable of 155,000 DWT tankers.
- **Tank Farm:** 6 x 500,000 bbl Crude Oil tanks. 3 million bbls total storage.
- **Safety Equipment:** Dedicated firefighting system with fixed water & AFFF foam monitors on the pier and in the tank farm.
- **Oilspill Equipment:** 1,000 m of 1m boom, several small boats and associated response gear. ECRC provide spill response service with pre-positioned equipment on-site.
- **Other Equipment:** Process heaters, pumps, oily water handling facilities.
- **Escort Tugs:** Two 5,600 HP Voith Schneider tractor tugs with 56 tonnes bollard pull. Tugs have firefighting monitors (2,400 m<sup>3</sup>/hr) and AFFF foam supply.
- **Security:** Site fully fenced with a security guard at the front gate and cameras mounted throughout the facility.



## Docking a Shuttle Tanker with an Escort Tug





## Protection of People & Environment:

Protection of facility personnel, the general public and the environment is of paramount importance to NTL. Some key activities that accomplish this are:

- **The design of the terminal:** All crude oil is contained in tanks and pipelines that are built to international standards. The facility has a sophisticated distributed control system and emergency control system to monitor and control all operations.
- **Training of personnel:** All personnel are extensively trained in the safe handling of crude oil, emergency response, spill response, vessel operations, fire fighting, and plant operations.
- **Fire protection systems:** The terminal has extensive firewater protection of all tanks, pier areas and other high risk areas of the facility. In addition, the two escort tugs have firewater pumps and monitors with foam capability.
- **Tanker vetting:** All vessels visiting the terminal are “vetted” by NTL before they are accepted at the terminal. Vessels with an unsatisfactory safety or environmental history are not accepted at the terminal.



## Protection of People & Environment cont'd:

- **Crude Handling:** All crude handling areas of the terminal including the tanks and the piers are contained within a dike system. Any collected oil or oily water is recovered and treated.
- **Tanker Escort:** All laden tankers are escorted by one of the escort tugs. This includes inbound shuttle tankers and outbound 2nd leg tankers. The tugs can control and redirect a malfunctioning tanker .
- **Spill Mitigation:** The Facility has a comprehensive Oil Pollution Prevention Plan and conducts annual oilspill exercises. Oilspill equipment is pre-positioned at the terminal and the tugs are able to deploy this equipment. ECRC is NTL's spill response organization.
- **Regulatory / Security:** The terminal is compliant with all federal and provincial regulations. The terminal is fully certified to the International Ship and Port Security Code.





## **Tanker Vetting @ NTL:**

- Tanker Vetting is the review of a vessel's trading experience to see if it meets the standards set forth by NTL's shareholders for entry to the terminal.
- All of NTL's Customers tankers are vetted. Each Customer is required to propose a tanker several weeks in advance so that we can review the history of the vessel and verify it meets our standards. If the tanker does not pass vetting the vessel is not allowed to load/discharge at Whiffen Head.
- NTL uses a variety of source data to review and investigate the performance history of a specific tanker.
- Numerous regulatory and international agencies collect performance information on tankers.



## Who sets the standards for Tankers? Part I

Numerous agencies regulate and inspect tankers. These include:

- International Maritime Organization (IMO). The IMO establishes operating, design and safety standards for tankers and other vessels. They are normally issued as conventions. Some well known ones are: SOLAS (Safety of Life at Sea), International Load Line, MARPOL (Marine Pollution Prevention), Civil Liability etc.. The conventions typically assign inspection duties to both flag and port state control entities.
- Government entities, like the Canadian Coast Guard, US Coast Guard etc.. National Regulators wear several hats such as Port State control and Flag State control under IMO regulations and as inspectors under their country's specific legislation.
- Classification Societies. All tankers are built to class rules. Class means that the tankers are designed, maintained and inspected to a consistent set of rules. Well known class societies are DnV, Lloyd's Register, ABS and BV.



## Who sets the standards for Tankers? Part II

- Insurance Companies: both Protection & Indemnity (P&I) and Hull & Machinery (H&M) insurers have standards to control their risks.
- Owner Companies and Charterers may have inhouse requirements that exceed the international class or regulatory standards.
- OCIMF (Oil Companies International Marine Forum) publishes numerous guidelines on safe tanker operations. All the major oil transporting companies require adherence to these guidelines.
- INTERTANKO, the independent tanker owners organization also has established numerous guidelines on safe tanker design, operations and maintenance.



## What Tanker Data is Available?

An significant amount of Tanker data is available including:

- port and flag state inspection reports (USCG, Transport Canada)
- Classification Society annual & special survey reports.
- OCIMF Ship Inspection Report program (SIRE)
- commercial databases such as Fairplay, Lloyd's List etc.
- Ship broker data
- Oil company inhouse performance data.
- IMO databases.
- ....



## What has Vetting demonstrated over the Years?

- **Valuable data to assess a tanker is:**
  - the name of the vessel owner/ship manager
  - the results of Port State and Flag State inspections
  - the results of classification society inspections
  - the SIRE inspection reports
  
- **Low Value Data includes:**
  - flag of the vessel
  - age of the vessel
  - single vs double hull construction.



## Sources of Tanker data:

- **Equasis** database: { [www.equasis.org](http://www.equasis.org) }. This database allows one to check on the results of classification society inspections for any vessel.
- **USCG Port State Control** database: { <http://www.uscg.mil/hq/g-m/pscweb/Index.html> }. This has a wealth of data on the performance of a vessel in US waters including detailed inspection findings.
- **SIRE** database: { [www.ocimf.com](http://www.ocimf.com) } You need to join the SIRE program to get access to copies of the inspections. The costs vary depending on the user status ie government, vessel charterer etc.
- **Transport Canada Ship Safety**:  
{ <http://www.tc.gc.ca/marinesafety/Ships-and-operations-standards/Inspection/Port-State-Control/stats.htm> }. This site has summary data on vessel inspections but no details.



## **Tanker Vetting Conclusions:**

- Tanker Vetting is a valuable Risk Mitigation Tool. It allows NTL to refuse entry to vessels with a questionable performance record .
- The Tanker industry is highly regulated. Each tanker undergoes several inspections a year by various knowledgeable groups/agencies.
- Experience shows that a quality vessel owner/operator has quality vessels.
- Experience also shows that the vessel flag, construction technique and age are not key factors in determining the quality performance of a vessel.
- NTL's Customers pay a premium to use high quality vessels. They do this to minimize the risk of an environmental incident with a tanker. They consider this extra cost money well spent.