NSW EPA Shipping Emissions Stakeholder Workshop

Sulphur compliance and enforcement - a shipping perspective
Agenda

» WWL at a glance

» Compliance approaches & deciding factors

» Regulatory Impact & Enforcement

» Regulatory considerations, industry preferences
WWL at a glance
WWL in brief

- Own fleet of 60+ ROROs
  - Deep sea, global

- 153 year heritage

- ‘Factory to dealership’
  - 4.3m moves by sea, 6m by land

- USD3bn revenue 2013

- Enviro frontrunner
Frontrunner strategy

- ‘Exceed responsibilities today to reduce risk and cost tomorrow’

WWL sulphur policy
- Technical & operational experience
- Invaluable relationships
 Compliance Approaches & Deciding Factors
About 4 Stream Approach

- No silver bullet solution expected
- All solutions require maturing / proving
- Best compliance solutions still unclear
- All options must be kept on the table
Distillate fuels (MGO)

- Common 2015 choice; familiar
- Tank conversions
- Fuel switchover
- Long term use?
- Massive global market
- Availability vis-à-vis global cap?
Other energy sources

- LNG, biodiesel, methanol, fuel cells
- solar / wind / nuclear power…

- ‘Drop in’ / retrofit / NB solution?

- Coastal vs. deep sea feasibility

- Global avails & supply infrastructure

- WWL: LNG project
Exhaust gas cleaning systems

- Downstream solution
- ‘Open heart surgery’
- Familiar technology, new use
- Emissions: perception & reality
- Moving goalposts?
- WWL Tarago trial
ULSFO (<0.5% bunker oil)

- New refinery product
- Similar properties to HFO
- Compatibility & segregation
- Avails limited for now
- Competition developing
- WWL: sea trial partner for ‘HDME50’
Deciding Factors
Regulatory Impact & Enforcement
2015 ECA: unprecedented cost

Bunkerworld Price History

1st Jan 2011 to 30th Jun 2014

50%
Hard hitting regulation

\[ \Delta \approx \text{USD}300/t \quad 40-70t \quad \text{USD}10-20k \]

Per vessel per day

Other issues:
- Extent
- Impact
- Uncertainty

Direct commercial consequences
One more challenge: weak enforcement

- European Commission study
  - 1/1000 inspection rate
  - Small fines

- Rumours
  - Some buy no LS HFO
  - BDN’s with blank % S

- As regulatory cost increases enforcement, more than regulation by itself, is the driver of compliance
Enforcement: 3 main issues

- **Capacity & training**
  - The ‘shopping list’
  - Technically specific

- **Detection**
  - Vessels underway
  - Legal standing

- **Jurisdiction**
  - Territorial waters
  - ‘Compound infractions’
Only good for bad

- Weak enforcement + high cost = temptation
  - Bad behaviour rewarded, good punished
  - Inverted regulatory dynamic

- Without action, noncompliance will spread

- Negative for environment & health

- Bad for shippers & compliance solution providers
Situation will not self-correct

...more likely to get worse 2020+

Unacceptable business risk
Trident Alliance: enlightened self-interest

- Single issue shipping network
  - Sulphur specific
  - Committed to fair competition through effective enforcement & transparency

- Strong message
  - Aligned: environment, health & industry

www.tridentalliance.org
We are the Trident Alliance
Regulatory considerations, industry preferences
Industry preferences

- Global industry with a global regulatory framework
- Use established IMO instruments
- Mandatory, not voluntary initiative
- Two fuel regime - internationally aligned
- Robust & transparent enforcement
- ‘Effective, proportionate and dissuasive’ penalties
WWL: telling it like it is, taking it where it needs to go
So why comply?

It’s the law and it’s not optional!

We believe these holds true for our customers too.
Approach & Initiatives

**Communication**
- Awareness – first step toward a solution
- Enforcement: regular headline issue

**Innovation**
- Faster, cheaper & more extensive detection
- Satellite control of drones
- Portable fuel analysis devices

**Transparency**
- Potential paradigm shift
- Not all regulatory problems need regulatory solution...