Ballast Water Management Compliance and Enforcement

2006-2015

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**Ballast Water Management Options**

- Retain all ballast on board/no discharge
- Discharge to a shore or barge-based reception facility (none currently exist)
- On board ballast water treatment systems
- Ballast water exchange (BWE)
  - 200 NM from land (non-PCR arrivals)
  - 50 NM from land (PCR arrivals)
Evaluating Compliance

**Ballast water reporting forms:**
- Forms contain information on source, exchange and discharge locations whether in port or open ocean
- Quality controlled database extending back to 2002

**On board ship inspections:**
- 25% of arrivals are mandated to be inspected by SLC inspectors
- Perform outreach, check ballast logs/management plan, verify exchange locations, test ballast salinity

**GIS analysis:**
- Evaluates compliance in open ocean
- Identifies potential underlying reasons for violations
- Great toolbox for analyzing trends and patterns of very large datasets
• Quarterly GIS compliance analyses are run using ArcGIS 10.2 (since 1/2014)

• Results are used both for informational and enforcement purposes
  • Violation letters are sent to owners and agents of noncompliant vessels
2014:

- 1,510 vessel arrivals discharged a total of 9,875 separate ballast water tanks
Compliance Evaluation Flowchart

1. Last port of call is outside of the Pacific Coast Region (PCR)
   - Exchange conducted
     - Exchange location is outside of any EEZ
     - Exchange location is unknown
     - Exchange location is within any EEZ
   - Source location is outside of any EEZ
     - Source location is the same as discharge location
     - Source location is not the same as discharge location
   - Source location is unknown
     - Source location is within an EEZ
     - Source location is not within any EEZ
     - Source location is not the same as discharge location
     - Source location is not the same as discharge location

2. Exchange not conducted
   - Source location is unknown
Total Discharge

- Average discharge - 10.8 MMT/year
- Volume is increasing over time
- 3 out of last 5 years have seen highest reported discharge amounts since the inception of MISP
• Tankers and bulk vessels account for 89% of the ballast water discharge volume in California.

• The average volume discharged per event has nearly doubled.
Noncompliant Discharges

![Bar chart showing noncompliant discharges from 2006 to 2015. The y-axis represents Million Metric Tons, and the x-axis represents the years. The chart shows a significant decrease in discharges from 2006 to 2015.]
Discharge by Vessel Type

- Auto
- Bulk
- Container
- General
- Other
- Passenger
- Tank
- Unmanned Barge

- Compliant
- Noncompliant

Volume MMT
Type of Noncompliant Discharge

- **Exchanged Wrong Location**
- **No Exchange**

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<tbody>
<tr>
<td>Value</td>
<td>1.4</td>
<td>1.0</td>
<td>1.2</td>
<td>0.8</td>
<td>0.8</td>
<td>1.2</td>
<td>0.8</td>
<td>1.4</td>
<td>0.6</td>
<td>0.2</td>
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**Million Metric Tons**
Type of Noncompliant Discharge

- Exchanged Wrong Location
- No Exchange

Million Metric Tons

Years: 2006 to 2015
2014 Unexchanged Ballast Source
2015 Unexchanged Ballast Source
### Enforcement Numbers:

<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td><strong>Total Arrivals</strong></td>
<td>9,345</td>
<td>9,055</td>
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<tr>
<td><strong>Discharged</strong></td>
<td>1,510 (16%)</td>
<td>1,349 (15%)</td>
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<tr>
<td><strong>Operational Violations</strong></td>
<td>104</td>
<td>66</td>
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<tr>
<td>- Field Inspections</td>
<td>28</td>
<td>20</td>
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<tr>
<td>- GIS</td>
<td>76</td>
<td>46</td>
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<tr>
<td><strong>Repeat Vessels</strong></td>
<td>13</td>
<td>3</td>
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<td><strong>Fixed/Amended BWRF</strong></td>
<td>18</td>
<td>17</td>
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<td><strong>Safety Exemptions:</strong></td>
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<tr>
<td>- Arrivals</td>
<td>27</td>
<td>30</td>
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<tr>
<td>- Vessels</td>
<td>9</td>
<td>11</td>
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<tr>
<td>- Claimed after violation</td>
<td>6</td>
<td>2</td>
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</table>
Enforcement Numbers:

- Tanks Discharged: 9,875 in 2014, 8,683 in 2015
- NC Tanks: 557 in 2014, 334 in 2015
- No Exchange: 118 in 2014, 49 in 2015
CA Public Resources Code section 71216:

...a person who intentionally or negligently fails to comply with the requirements of this division may be liable for an administrative civil penalty in an amount that shall not exceed twenty-seven thousand five hundred dollars ($27,500) for each violation. Each day of a continuing violation constitutes a separate violation.
ARTICLE 4.9: MARINE INVASIVE SPECIES ACT ENFORCEMENT AND HEARING PROCESS

Purpose: To classify violations and penalties of MISA and establish policies and procedures CSLC shall undertake in assessing and commencing administrative enforcement actions pursuant to CA PRC section 71216

1. Class 1 (operational)
   - **Minor** – a vessel incorrectly exchanges ballast water within 10% of the limits
   - **Moderate** – a vessel incorrectly exchanges ballast water between 10-50% of the limits
   - **Major (I)** – a vessel incorrectly exchanges ballast water more than 50% of the limits
   - **Major (II)** – a vessel does not exchange water before discharging at receiving port
ARTICLE 4.9: MARINE INVASIVE SPECIES ACT ENFORCEMENT AND HEARING PROCESS

2. Class 2 (administrative)
   • Occurs as a result of a vessel failing to properly maintain required documents (e.g. ballast water management plan) on board.

3. Class 3
   • Occurs as a result of a vessel failing to submit required form (e.g. Ballast Water Reporting Form) in the given time period after receiving official notification

• 45-day comment period to commence early-April
Thank you!

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