US EPA Vessel General Permit: Implementation and Reissuance

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Water Permits Division
U.S. Environmental Protection Agency
EPA VGP-Related Activities

- Administer VGP (including draft 2018 reissuance)
- Studies/Research/Other
  - BW management technical development document
  - Great Lakes interlake/coastal BW transfers
  - BW exchange plus treatment
  - ETV Ballast Water Treatment Testing Protocol update
  - Hull fouling sensor technology
- Keep abreast of Vessels Incidental Discharge Act (VIDA) draft legislation
Vessel Permitting: Brief History

- **1972**: Clean Water Act (CWA) enacted, requires among other things, permits for discharges of pollutants to waters of the United States – EPA interpreted this to not apply to vessel incidental discharges.

- **2006**: U.S. District Court decides CWA does require discharge permits for vessel incidental discharges.

- **2008** – First VGP issued (5 years).

- **2013** – VGP reissued (5 more years).

- **Oct. 2015** – U.S. Appeals Court determines certain aspects of 2013 VGP are arbitrary and capricious but leaves 2013 VGP in effect.

- **Dec. 2018** – Third VGP expected to be issued.
2013 Final VGP – Overview

- Jurisdiction of the permit
  - Inland waters, territorial sea up to 3 nautical miles (nm)

- Discharge coverage
  - 27 discharge types incidental to the normal operation of a non-recreational and non-military vessels 79 feet or longer, except commercial fishing vessels, and all ballast water discharges, regardless of size
  - Additional vessel class-specific conditions for 8 classes of vessels

- Certain vessel discharges not eligible for coverage (e.g., sewage)

- Most vessel operators must submit a Notice of Intent (NOI) to obtain permit coverage.
Key Ballast Water Management Requirements

- Training (2.2.3.1)
- Ballast Water Management Plan (2.2.3.2)
- Mandatory Measures (2.2.3.3)
  - Avoid/Minimize discharge/uptake in sensitive areas
  - Clean tanks regularly (but don’t discharge sediment)
  - Use high sea suction for intake and ballast water pumps for discharging, when feasible
  - Minimize ballast water discharge
- Ballast water numeric discharge limitations (2.2.3.5)
Four possible options to meet limits:

- Use a treatment device (i.e., USCG-type approved system or an AMS)
- Use onshore treatment
- Use public water supply water (from US and Canada only)
- No discharge
Ballast Water – Interim Requirements

- Interim requirements must be met until numeric limits apply
  - Requirements fundamentally the same as the 2008 VGP

- Interim requirements include:
  - Incorporating existing U.S. Coast Guard mandatory management and exchange requirements
  - Mandatory saltwater flushing for all vessels with residual ballast water and sediment (NOBOBs) coming from outside the US EEZ and 200 nm from shore
  - Mandatory exchange and flushing for vessels engaged in Pacific nearshore voyages
  - Conducting exchange as early as practicable
EPA Ballast Water Enforcement Response Policy

- The ERP states that vessels that don’t meet the VGP’s numeric ballast water limits and have received an extension from the USCG and are otherwise in compliance with all other VGP requirements, including submission of a valid NOI, are considered a low enforcement priority.
- EPA and the USCG developed a joint package that is sent to vessel owners/operators that have received an extension from the USCG.
  - This package includes the USCG extension, the ERP and a joint cover letter signed by both Agencies.
- We believe the ERP addresses the primary concerns of industry regarding non-alignment of requirements of the USCG and EPA.
Current Implementation and Enforcement Approach

- EPA – Implements and administers the VGP
- USCG – Inspect vessels for compliance with the VGP
- EPA – Conducts enforcement actions (and limited inspections) for the VGP
Ballast Water Monitoring

- Monitoring requirements if using a treatment device and discharge to U.S. waters
  - **Functional**
    - Goal is to test if the system functioning as designed (e.g., applying chlorine dose, filtering water)
  - **Biological**
    - *E. coli*, enterococci, and total heterotrophic bacteria
  - **Active substance (biocides) and residuals**
    - Numeric limits for systems using chlorine, chlorine dioxide, ozone, and peracetic acid
    - Other parameters set at National Water Quality Criteria or in consultation with EPA
Reporting

- **Annual Report**
  - Due by February 28 for previous year
  - Submit electronically through VGP eNOI system
  - Includes information such as:
    - Inspections
    - Treatment technologies
    - Discharges
    - Monitoring results
    - Noncompliance
State Water Quality Certifications

- Under Section 401 of the Clean Water Act, States have the authority to add additional requirements to any EPA permit as necessary to protect water quality in that state.

- States with Additional Ballast Water Requirements in Part 6 of the 2013 VGP:
  - 7 Great Lakes States (IL, IN, MI, MN, NY, OH, WI)
  - 7 Other States (AZ, CA, CT, HI, ME, RI, WA)
## Notice of Intent (NOI) Data for 2013 VGP

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>No. NOIs</th>
<th>Non-US Flagged</th>
<th>% Non-US</th>
<th>Total Number w/ BWTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Carrier</td>
<td>7,922</td>
<td>7,869</td>
<td>99%</td>
<td>427</td>
</tr>
<tr>
<td>Container Ship</td>
<td>2,735</td>
<td>2,654</td>
<td>97%</td>
<td>109</td>
</tr>
<tr>
<td>Cargo/Reefer</td>
<td>1,915</td>
<td>1,881</td>
<td>98%</td>
<td>86</td>
</tr>
<tr>
<td>Med./Lg Cruise Ship</td>
<td>299</td>
<td>235</td>
<td>79%</td>
<td>16</td>
</tr>
<tr>
<td>Oil/Gas/Chemical Tanker</td>
<td>5,498</td>
<td>5,421</td>
<td>99%</td>
<td>316</td>
</tr>
<tr>
<td>RORO/PCC/PCTC</td>
<td>856</td>
<td>784</td>
<td>92%</td>
<td>75</td>
</tr>
<tr>
<td>Other</td>
<td>35,043</td>
<td>719</td>
<td>2%</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54,268</strong></td>
<td><strong>19,563</strong></td>
<td><strong>36%</strong></td>
<td><strong>1,085</strong></td>
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</tbody>
</table>
# Ballast Water Discharges (2014 Annual Reports)

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Operated in US</th>
<th>Discharged Ballast Water in US</th>
<th>BWTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Carrier</td>
<td>3,297</td>
<td>2,954 (90%)</td>
<td>138</td>
</tr>
<tr>
<td>Container Ship</td>
<td>1,155</td>
<td>307 (27%)</td>
<td>64</td>
</tr>
<tr>
<td>General Cargo, Reefer</td>
<td>802</td>
<td>483 (60%)</td>
<td>48</td>
</tr>
<tr>
<td>Med./Lg Cruise Ship</td>
<td>201</td>
<td>49 (24%)</td>
<td>22</td>
</tr>
<tr>
<td>Oil/Gas/Chemical Tanker</td>
<td>2,228</td>
<td>1,642 (74%)</td>
<td>76</td>
</tr>
<tr>
<td>RORO/PCC/PCTC</td>
<td>489</td>
<td>71 (15%)</td>
<td>56</td>
</tr>
<tr>
<td>Other</td>
<td>27,143</td>
<td>774 (3%)</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,315</strong></td>
<td><strong>6,280 (18%)</strong></td>
<td><strong>426</strong></td>
</tr>
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</table>
## Ballast Water Treatment (VGP Annual Reports)

<table>
<thead>
<tr>
<th>Treatment System</th>
<th>2014 Total</th>
<th>2015 Total</th>
<th>USCG AMS?</th>
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</thead>
<tbody>
<tr>
<td>Techcross (Electro-Cleen)</td>
<td>93</td>
<td>180</td>
<td>Yes</td>
</tr>
<tr>
<td>Panasia (GloEn-Patrol)</td>
<td>50</td>
<td>111</td>
<td>Yes</td>
</tr>
<tr>
<td>Alfa Laval Tumba (Pure Ballast)</td>
<td>64</td>
<td>98</td>
<td>Yes</td>
</tr>
<tr>
<td>Hyde Marine (Hyde Guardian)</td>
<td>41</td>
<td>67</td>
<td>Yes</td>
</tr>
<tr>
<td>Qingdao/Headway (OceanGuard)</td>
<td>11</td>
<td>53</td>
<td>Yes</td>
</tr>
<tr>
<td>JFE (BallastAce)</td>
<td>26</td>
<td>51</td>
<td>Yes</td>
</tr>
<tr>
<td>Hyundai Heavy Industries (EcoBallast)</td>
<td>13</td>
<td>40</td>
<td>Yes</td>
</tr>
<tr>
<td>Optimarin (Optimarin)</td>
<td>32</td>
<td>37</td>
<td>Yes</td>
</tr>
<tr>
<td>NK (Blue Ballast)</td>
<td>22</td>
<td>31</td>
<td>Yes</td>
</tr>
<tr>
<td>Ocean Saver (Ocean Saver)</td>
<td>9</td>
<td>30</td>
<td>Yes</td>
</tr>
<tr>
<td>RWO Marine (CleanBallast)</td>
<td>7</td>
<td>27</td>
<td>Yes</td>
</tr>
<tr>
<td>Samsung Heavy Industries (Purimar)</td>
<td>4</td>
<td>23</td>
<td>Yes</td>
</tr>
<tr>
<td>SunRui Marine (Balclor)</td>
<td>11</td>
<td>18</td>
<td>Yes</td>
</tr>
<tr>
<td>COSCO (Blue Ocean Shield)</td>
<td>5</td>
<td>13</td>
<td>Yes</td>
</tr>
<tr>
<td>Kuraray (Microfade)</td>
<td>8</td>
<td>11</td>
<td>Yes</td>
</tr>
<tr>
<td>Wuxi Brightsk (BSKY)</td>
<td>7</td>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>Other (approx. 18 vendors)</td>
<td>12</td>
<td>45</td>
<td>Yes</td>
</tr>
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</table>
## Monitoring Data Submitted

<table>
<thead>
<tr>
<th>Type of Monitoring Data Submitted</th>
<th># Vessels (2014)</th>
<th># Vessels (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functionality Monitoring</td>
<td>33</td>
<td>72</td>
</tr>
<tr>
<td>Biological Monitoring</td>
<td>16</td>
<td>62</td>
</tr>
<tr>
<td>Residual Biocide Monitoring</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total No. Vessels</strong></td>
<td><strong>43</strong></td>
<td><strong>81</strong></td>
</tr>
</tbody>
</table>
## Biological Monitoring Results (2014)

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>No. of Samples</th>
<th>No. Detects</th>
<th>Max. Value</th>
<th>BWTS</th>
<th>Med. Det. Value</th>
<th>Mean Det. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>THB</td>
<td>cfu</td>
<td>20</td>
<td>18</td>
<td>70,000</td>
<td></td>
<td>158</td>
<td>7,620</td>
</tr>
<tr>
<td>THB</td>
<td>MPN</td>
<td>11</td>
<td>4</td>
<td>141</td>
<td></td>
<td>37</td>
<td>55</td>
</tr>
<tr>
<td>E. coli (limit: 250)</td>
<td>cfu</td>
<td>18</td>
<td>4</td>
<td>2,420 (3 exc)</td>
<td>UV, O₃</td>
<td>1,084</td>
<td>1,148</td>
</tr>
<tr>
<td>E. coli</td>
<td>MPN</td>
<td>13</td>
<td>4</td>
<td>24,196</td>
<td></td>
<td>1</td>
<td>6,052</td>
</tr>
<tr>
<td>Entero. (limit 100)</td>
<td>cfu</td>
<td>27</td>
<td>7</td>
<td>2,420 (2 exc)</td>
<td>UV</td>
<td>76</td>
<td>728</td>
</tr>
<tr>
<td>Entero.</td>
<td>MPN</td>
<td>4</td>
<td>2</td>
<td>24,000</td>
<td></td>
<td>12,006</td>
<td>6,003</td>
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</tbody>
</table>
## Biological Monitoring Results (2015)

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>No. of Samples</th>
<th>No. Detects</th>
<th>Max. Value</th>
<th>BWTS</th>
<th>Med. Det. Value</th>
<th>Mean Det. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>THB</td>
<td>cfu</td>
<td>72</td>
<td>37</td>
<td>224,800</td>
<td></td>
<td>370</td>
<td>9,716</td>
</tr>
<tr>
<td>THB</td>
<td>MPN</td>
<td>10</td>
<td>6</td>
<td>23,900</td>
<td></td>
<td>24.5</td>
<td>4,027</td>
</tr>
<tr>
<td><em>E. coli</em> (limit: 250)</td>
<td>cfu</td>
<td>49</td>
<td>10</td>
<td>114</td>
<td></td>
<td>11.5</td>
<td>27</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>MPN</td>
<td>35</td>
<td>11</td>
<td>20</td>
<td></td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Entero. (limit 100)</td>
<td>cfu</td>
<td>63</td>
<td>17</td>
<td>152</td>
<td>UV</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Entero.</td>
<td>MPN</td>
<td>19</td>
<td>4</td>
<td>55</td>
<td></td>
<td>7</td>
<td>18</td>
</tr>
</tbody>
</table>
## Residual Biocide Monitoring (2014)

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>No. of Vessels</th>
<th>No. of Samples</th>
<th>No. Detects</th>
<th>Max. Value</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Dioxide</td>
<td>µg/L</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Chlorine (as TRO)</td>
<td>µg/L</td>
<td>2</td>
<td>22</td>
<td>16</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>µg/L</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Haloacetic Acids</td>
<td>µg/L</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Bromate</td>
<td>µg/L</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bromoform</td>
<td>µg/L</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Analyte</td>
<td>Units</td>
<td>No. of Vessels</td>
<td>No. of Samples</td>
<td>No. Detects</td>
<td>Max. Value</td>
<td>Limit</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------</td>
<td>----------------</td>
<td>----------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>µg/L</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Chlorine (as TRO)</td>
<td>µg/L</td>
<td>9</td>
<td>66</td>
<td>27</td>
<td>200 (1)</td>
<td>100</td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>µg/L</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>200</td>
<td>--</td>
</tr>
<tr>
<td>Haloacetic Acids</td>
<td>µg/L</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>53.4</td>
<td>--</td>
</tr>
<tr>
<td>Bromate</td>
<td>µg/L</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>174</td>
<td>--</td>
</tr>
<tr>
<td>Bromoform</td>
<td>µg/L</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>46.1</td>
<td>--</td>
</tr>
<tr>
<td>Menadione</td>
<td>ug/l</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Chlorite</td>
<td>ug/l</td>
<td>8</td>
<td>17</td>
<td>4</td>
<td>1,900</td>
<td>--</td>
</tr>
<tr>
<td>Chlorate</td>
<td>ug/l</td>
<td>8</td>
<td>17</td>
<td>5</td>
<td>73,200</td>
<td>--</td>
</tr>
<tr>
<td>Akylamines</td>
<td>ug/l</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

(1) One value exceeded limit using ozone treatment system.
Example Reported Ballast Water Noncompliance (2014)

- Failure to monitor ballast water discharges
- Monitoring values exceeded effluent limitations
- Failure to record deballasting correctly
- Sheen noticed in ballast water discharge
- Used wrong ballast water reporting form
- BWMP incomplete
- BW exchange occurred within 200 NM of shore
Biofouling

- Hull fouling identified as one of the primary vectors for Aquatic Nuisance Species (ANS) introduction
Biofouling – Permit Requirements

- Hull fouling regulated under 3 discharge types in the VGP
  - Anti-foulant Hull Coatings
  - Cathodic Protection
  - Underwater Ship Husbandry (Primary Section)
Biofouling – Permit requirements

• Vessel operators must minimize hull fouling when not engaged in short distance voyages (from Underwater Ship Husbandry requirements):
  • Management measures to minimize the transport of attached living organisms include:
    • Selecting an appropriate anti-foulant management system and maintaining that system,
    • Conducting an in-water inspection,
    • Cleaning and maintenance of hulls, and
    • Thorough hull and other niche area cleaning when a vessel is in drydock.
  • Specified management measures consistent with IMO guidelines
• When feasible, flush-fit sacrificial anodes to the hull or fill the space between the anode and hull backing (From Cathodic Protection requirements)
### VGP Annual Report Data

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Annual Reports</td>
<td>42,072</td>
<td>42,661</td>
<td>41,773</td>
</tr>
<tr>
<td>Operated in US Waters</td>
<td>35,383</td>
<td>35,669</td>
<td>34,890</td>
</tr>
<tr>
<td>Discharged Ballast Water in US Waters</td>
<td>6,256</td>
<td>6,156</td>
<td>6,191</td>
</tr>
<tr>
<td>BWMS Onboard</td>
<td>428</td>
<td>834</td>
<td>1,400</td>
</tr>
<tr>
<td>BWMS Onboard and Discharge BW in US</td>
<td>245</td>
<td>535</td>
<td>919</td>
</tr>
</tbody>
</table>

### Reported Next Scheduled Drydock Date

<table>
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<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>117</td>
<td>1,314</td>
<td>1,642</td>
<td>872</td>
<td>601</td>
<td>304</td>
<td>28</td>
<td>394</td>
</tr>
</tbody>
</table>
Ballast Water Treatment Systems (Annual Report Data)
# Ballast Water Biological Monitoring (2014/15)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hetero. Bacteria</td>
<td>cfu</td>
<td></td>
<td>13</td>
<td>55</td>
<td>24</td>
<td>74</td>
<td>67</td>
<td>68%</td>
<td></td>
<td>1</td>
<td>225,000</td>
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</tr>
<tr>
<td>Total Hetero. Bacteria</td>
<td>MPN</td>
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<td>8</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>43%</td>
<td></td>
<td>8</td>
<td>23,900</td>
<td>2,440</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>cfu</td>
<td>250</td>
<td>10</td>
<td>39</td>
<td>19</td>
<td>50</td>
<td>24</td>
<td>35%</td>
<td>2</td>
<td>1</td>
<td>2,420</td>
<td>240</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>MPN</td>
<td>10</td>
<td>29</td>
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2013 VGP Lawsuit

- Petitioners:
  - National Resource Defense Council (NRDC)
  - Northwest Environmental Advocates (NWEA)
  - National Wildlife Federation (NWF)
  - Center for Biological Diversity (CBD)
  - Lake Carriers’ Association (LCA) - Intervenors
  - Canadian Shipowners (CSA) – Intervenors

- Were EPA’s actions:
  - Arbitrary and capricious, or
  - Abuse of discretion, or
  - Not in accordance with law
October, 5 2015 2\textsuperscript{nd} Circuit Court Decision

Findings For EPA

Technically-Based Limits

- Appropriate to not include numeric limits for viruses and protists
- Monitoring and reporting approach to demonstrate compliance with limits is appropriate
Findings Against EPA

Technically Based Limits
• Improper reliance on IMO Standard
• Failure to adequately consider onshore treatment
• Inappropriate exemption of 2009 Lakers from numeric limits

Water-Quality
• Insufficient water quality based limits
• Failure to establish water quality based monitoring

• Permit remains unchanged until reissuance.
Development of 2018 VGP

- Current VGP expires - December 18, 2018
- Publish Draft Permit – Fall 2017
- Public Comment Period – likely 60-75 days
- Publish Final Permit – Fall 2018
- Permit Effective Date – December 19, 2018
2018 VGP Development Considerations

- Existing 2013 VGP
- 2\textsuperscript{nd} Circuit Court Decision
- State of Best Available Technologies
- Permit Clarity (e.g., monitoring/reporting)
- Reported Annual Report Data from 2013 VGP
- Input from Stakeholders

- Endangered Species Act Consultation
- State Certifications
Streamlining - Existing VGP Part 1

1. COVERAGE UNDER THIS PERMIT
1.1 Permit Structure
1.2 Eligibility
1.2.1 General Scope of this Permit
1.2.2 Vessel Discharges Eligible for Coverage
1.2.2.1 Deck Washdown and Runoff and Above Water Line Hull Cleaning
1.2.2.2 Bilgewater/Oily Water Separator Effluent
1.2.2.3 Ballast Water
1.2.2.4 Anti-fouling Hull Coatings/Hull Coating Leachate
1.2.2.5 Aqueous Film Forming Foam (AFFF)
1.2.2.6 Boiler/Economizer Blowdown
1.2.2.7 Cathodic Protection
1.2.2.8 Chain Locker Effluent
1.2.2.9 ... Oil Sea Interfaces ...
1.2.2.10 Distillation and Reverse Osmosis Brine
1.2.2.11 Elevator Pit Effluent
1.2.2.12 Firemain Systems
1.2.2.13 Freshwater Layup
1.2.2.14 Gas Turbine Washwater
1.2.2.15 Graywater
1.2.2.16 Motor Gasoline and Compensating Discharge
1.2.2.17 Non-Oily Machinery Wastewater
1.2.2.18 Refrigeration and Air Condensate Discharge
1.2.2.19 Seawater Cooling Overboard Discharge
Existing VGP Part 1 (pg 2)

1.2.2.20 Seawater Piping Biofouling Prevention
1.2.2.21 Boat Engine Wet Exhaust
1.2.2.22 Sonar Dome Discharge
1.2.2.23 Underwater Ship Husbandry
1.2.2.24 Weldeck Discharges
1.2.2.25 Graywater Mixed with Sewage from Vessels
1.2.2.26 Exhaust Gas Scrubber Washwater Discharge
1.2.2.27 Fish Hold Effluent

1.2.3 Limitations on Coverage
1.2.3.1 (Other Discharges)
1.2.3.2 Sewage
1.2.3.3 Used or Spent Oil
1.2.3.4 Garbage or Trash
1.2.3.5 Photo-Processing Effluent
1.2.3.6 Effluent from Dry Cleaning Operations
1.2.3.7 Discharges of Medical Waste and Related Materials
1.2.3.8 Discharges of Noxious Liquid Substance Residues
1.2.3.9 Tetrachloroethylene (Perchloroethylene) and Trichloroethylene (TCE) Degreasers
1.2.3.10 Discharges Currently or Previously Covered by another NPDES Permit

1.3 Reserved
1.4 Permit Compliance
1.5 Authorization under this Permit
1.5.1 How to Obtain Authorization
1.5.1.1 Vessels Required to Submit Notices of Intent (NOIs)
1.5.1.2 Vessels Not Required to Submit Notices of Intent (NOIs)
1.5.2 Continuation of this Permit
1.6 Terminating Coverage
1.6.1 Terminating Coverage for Vessels Required to Submit a Notice of Intent (NOI)
1.6.1.1 Submitting a Notice of Termination (NOT)
1.6.1.2 When to Submit a NOT
1.6.2 Terminating Coverage for Vessels not Required to Submit a Notice of Intent (NOI)
1.7 Certification
1.8 Alternative Permits
1.8.1 EPA Requiring Coverage under an Alternative Permit
1.8.2 Permittee Requesting Coverage under an Alternative Permit
1.9 Permit Reopener Clause
1.9.1 Modification of the VGP
1.9.2 Water Quality Protection
1.10 Severability
1.11 State Laws
1.12 Federal Laws
1.13 Standard Permit Conditions
1.14 Electronic Reporting Requirement
1.15 Additional Notes
Possible New Part 1 Structure

1. COVERAGE UNDER THIS PERMIT
   1.1 Eligibility
      1.1.1 Vessel Discharges Eligible for Coverage
      1.1.2 Limitations on Coverage
   1.2 Authorization under this Permit
      1.2.1 How to Obtain Authorization
         1.2.1.1 Vessels Requiring a Notice of Intent (NOI)
         1.2.1.2 Vessels Not Requiring a Notice of Intent (NOIs)
      1.2.2 Continuation of this Permit
   1.3 Terminating Coverage
   1.4 Other Federal and State Laws

5 pages – 11 headings
5.1.2.2.2 Maintenance Monitoring

After demonstrating the effectiveness of their system, vessel owners/operators must collect and analyze one sample per quarter for each of the constituents listed in Part 5.1.2.2.1 to demonstrate treatment equipment maintenance and compliance with this permit for any quarter the vessel discharges graywater into waters subject to this permit. Furthermore, samples must be taken for *E. coli*, total phosphorus (TP), ammonia, nitrate/nitrite, and Total Kjeldahl Nitrogen (TKN). Regardless of whether a vessel has discharged into waters subject to this permit, maintenance monitoring must be conducted at least once per year or vessels must re-conduct initial monitoring in accordance with Part 5.1.2.2.1 before discharging into waters subject to this permit. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel’s recordkeeping documentation.

5.1.2.2.2 Maintenance Monitoring

You must:
- Sample quarterly for each of the constituents listed in Part 5.1.2.2.1 for any calendar quarter the vessel discharges graywater into waters subject to this permit.
- For any large cruise ship, sample annually regardless of whether the vessel has discharged into waters subject to this permit; otherwise, re-conduct initial monitoring in accordance with Part 5.1.2.2.1 before discharging into waters subject to this permit.
Ballast Water Standard Setting

- EPA currently developing a Ballast Water Management Technical Development Document as basis for 2018 VGP.
- Clean Water Act requires EPA to set standard to meet best available technology economically achievable (BAT). Factors considered in assessing BAT include:
  - cost of achieving BAT effluent reductions
  - age of equipment and facilities involved
  - engineering aspects of the processes employed by the industry and potential process changes
  - non-water quality environmental impacts, including energy requirements
  - other factors as EPA deems appropriate
- Include any additional requirements necessary to further protect water quality
Vessel General Permit (VGP)

EPA first issued the VGP in 2008 and subsequently reissued it in 2013. The VGP provides for NPDES permit coverage for incidental discharges into waters of the United States from commercial vessels greater than 79 feet in length and for ballast water from commercial vessels of all sizes. EPA estimates that approximately 61,000 domestically flagged commercial vessels and approximately 8,000 foreign flagged vessels require VGP permit coverage for such incidental discharges.

Final 2013 VGP

This permit is effective from December 19, 2013 to December 18, 2018 (i.e., five years). It provides NPDES permit coverage nationwide for discharges incidental to the normal operation of commercial vessels greater than 79 feet in length. The 2013 VGP supersedes the 2008 VGP that expired on December 18, 2013.
Contacts/Information

Website
www.epa.gov/npdes/vessels-incidental-discharge-permitting-3

VGP Questions
VGP@epa.gov

Electronic Reporting Questions
VGPeNOI@epa.gov