Vessel Specific Sampling Plan M/V Click here to enter text.

The sampler will use the VSSP as a guide to identify the specific onboard location(s) and sources to be sampled. To satisfy the VSSP requirement, fill in the blanks in this form starting on page 2. Please note that all fields must be completed. Please ensure to include “N/A” or a statement describing while a field does not apply, e.g. this vessel does not have intermediate tanks. Alternatively, you may submit an existing up-to-date VSSP if it contains the components listed in 18 AAC 69.030(b).

Please note that ADEC will not approve sampling locations that are more than 50 feet from the overboard discharge port. Samples taken in 2003 indicated that samples taken after the ultraviolet disinfection unit more than 50 feet from the discharge port were not of the same quality as samples taken just prior to discharge.

 The wastewater samples that are taken to satisfy the state requirements must reflect the quality of the effluent that is being discharged into Alaska waters during standard operating procedures.

Cruise ships operating under a Best Management Practices Plan (BMP) must follow any sampling requirements in that plan as well as the VSSP.

If you have questions concerning the components of the VSSP, please contact Albert Faure (907)-465-5279 or by email albert.faure@alaska.gov.

*Table on this page is for ADEC use only.*

|  |  |
| --- | --- |
| ADEC Approved on: |  |
| List of VSSP Revisions: | Revision Items: |

|  |  |
| --- | --- |
| Vessel Name: | Click here to enter text. |

*(Note: Include all units. Examples: cubic meters, gallons, cubic meters per second.)*

|  |  |
| --- | --- |
| Year ship joined fleet | Click or tap here to enter text. |
| Gross tonnage | Click or tap here to enter text. |
| Maximum passenger capacity | Click or tap here to enter text. |
| Crew capacity | Click or tap here to enter text. |

**Treatment equipment**

|  |  |
| --- | --- |
| MSD system (USCG type) | Click or tap here to enter text. |
| Number of MSD units | Click or tap here to enter text. |
| Other wastewater treatment units not listed above (list types & capacity) | Click or tap here to enter text. |

Generated Volumes

|  |  |  |
| --- | --- | --- |
|  | Amount | Units |
| Blackwater generation per day | Click or tap here to enter text. | Click or tap here to enter text. |
| Graywater generation per day (list units of measurement) | Accommodations | Click or tap here to enter text. | Click or tap here to enter text. |
| Galley | Click or tap here to enter text. | Click or tap here to enter text. |
| Laundry | Click or tap here to enter text. | Click or tap here to enter text. |
| Other | Click or tap here to enter text. | Click or tap here to enter text. |
| Daily water use/individual | Click or tap here to enter text. | Click or tap here to enter text. |
| Seawater usage per day | Click or tap here to enter text. | Click or tap here to enter text. |
| Peak water use per hour | Click or tap here to enter text. | Click or tap here to enter text. |
| Hours of peak water use | Click or tap here to enter text. |  |

|  |
| --- |
| **Discharge Ports** List all discharge ports which discharge graywater, blackwater or other wastewater. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Discharge port designation (name)** | **Wastewater types discharged** | **Diameter (list units)** | **Location** | **Vertical Distance from water line** | **Average Flow Rate** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |
| --- | --- |
| **Discharge Pumps** |  |
| Complete one line for each discharge pump (even if you have multiple discharge pumps per discharge port) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Pump name or #** | **Pump manufacturer and model** | **Maximum flow rate**  | **Units** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Collection Tanks** |  |  |
| List all of the vessel tanks which are involved with collection of wastewater prior to treatment |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tank name/number** | **Type of wastewater stored** | **Location**  | **Volume (with units of measurement)** |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |
| --- |
| **Intermediate Tanks** |
| List all of the tanks which are involved with wastewater treatment |

|  |  |  |  |
| --- | --- | --- | --- |
| **Tank name/number** | **Type of wastewater stored** | **Location**  | **Volume (with units of measurement)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| **Holding Tanks** |
| List all of the tanks which are involved with collection of wastewater for storage |

|  |  |  |  |
| --- | --- | --- | --- |
| **Tank name/number** | **Type of wastewater stored** | **Location**  | **Volume (with units of measurement)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Ballast Water Tanks:

List all of the tanks which are used (including optional available tankage) for the storage of ballast water.

|  |  |  |  |
| --- | --- | --- | --- |
| **Tank name/number** | **Ballast Water** | **Location**  | **Volume (with units of measurement)** |
|  |  |  |  |
|   |  |  |  |
|  |  |  |  |
|  |  |  |  |

Wastewater Treatment

Provide a description and capacity of the wastewater treatment system(s) on this vessel:

Click or tap here to enter text.

Discharges

Provide the individual vessel rules or procedures for discharging wastewater:

Click or tap here to enter text.

|  |
| --- |
|  |

Wastewater Sampling Port with suggested Locations and Timing

Describe the vessel’s sample port location(s), where the sampling should occur (in port or underway) and the time of day that the sampling should take place. The owner/operator needs to explain why these selected sampling sites and times give the most representative sample. The sample selection should be adequately mixed and homogenous. All samples need to be taken from wastewater as it is discharging overboard, unless deemed impractical by ADEC.

Click or tap here to enter text.

**Sample Port / Valve**

|  |  |
| --- | --- |
| Sample Valve Identification [notation used in WW Discharge Logbook] | Click here to enter text. |
| Sample Valve Location | Click here to enter text. |

**Photo of Sample Valve**:

Click here to enter text.



**Sample Suggested Timing:**

Click or tap here to enter text.

**Flushing vessel sample valve / sample Line:**

|  |  |
| --- | --- |
| Sample valve not directly attached to discharge line (Y/N) | Click here to enter text. |
| Length of sample line from discharge pipe to sample valve / line diameter [ft./m] | Click here to enter text. |
| Required minimum flushing volume [US gallons / Liters]  | Click here to enter text. |

Description of the standards the owner or operator will use to determine a deviation from the plan.

Click or tap here to enter text.

**Marine Sanitation Device (MSD) and WW System Tanks Overview:**

Attach a sketch, drawing, schematics, or sketches of the vessel with the Tank Plan(s) related to the WW operations and WW- treatment system (process), tanks, discharge pumps, discharge lines, sampling locations, and the overboard ports clearly identified.

Wastewater Sampling Tables

Note: Full list of sample parameters will appear in the approved Quality Assurance Project Plan.

Cruise ships operating under a DEC discharge permit must obtain the required number and types of samples as listed in the permit. Cruise ships sampling for EPA VGP or USCG must meet those agency requirements.

*Dates of sampling can be submitted separately by an operator or sampling contractor. Notification to DEC and USCG (if required) must be made 36 hours prior to a sample being taken.*

|  |  |  |  |
| --- | --- | --- | --- |
| Wastewater Type | Sample type | Sample Location | Representative times for Sampling |
|  | Grab |  |  |
|  | Grab |  |  |
|  | Grab |  |  |

Small Cruise Ship or Ferry sampling table

To be completed by DEC prior to approval

|  | **Frequency** |  |
| --- | --- | --- |
| **Black****water** | **Gray****water** | **Graywater** **source** |
| Temperature, pH, Chlorine (residual and free) | Parameters measured in the field for every sample |
| *Conventional parameters* |
| Fecal coliform, Total Suspended solids, Biochemical Oxygen Demand- 5 day, Specific Conductance |  |  |  |
| Settleable Solids, Chemical Oxygen Demand, Alkalinity, Hardness, Oil and Grease |  |  |  |
| *Nutrients* |
| Ammonia – Total |  |  |  |
| Total Organic Carbon ,Total Kjeldahl Nitrogen, Nitrate/Nitrite, Total Phosphorus |  |  |  |
| *Priority parameters* |
| BNA(TAqH) 1 |  |  |  |
| VOCs1 |  |  |  |
| Total Recoverable Metals List2  |  |  |  |
| Dissolved Metals List2except Hg |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table notes: |   |   |   |   |   |
| -Analyte groupings including minimum grouping for resampling scenarios will be detailed in the QAPP and permit or BMP. |
| -1BNA and VOC lists are found in the approved QAPP |
| -2Priority list metals: Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc. |