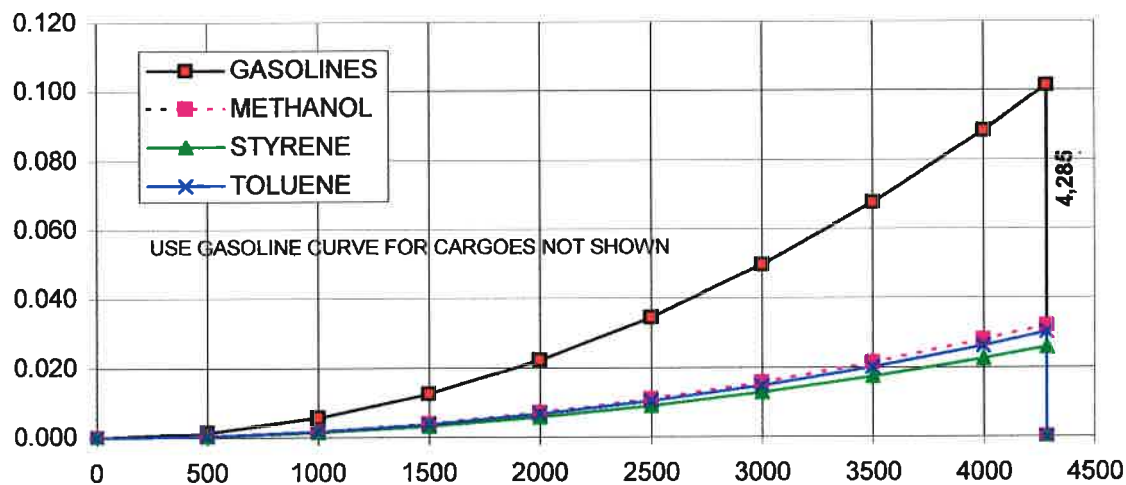
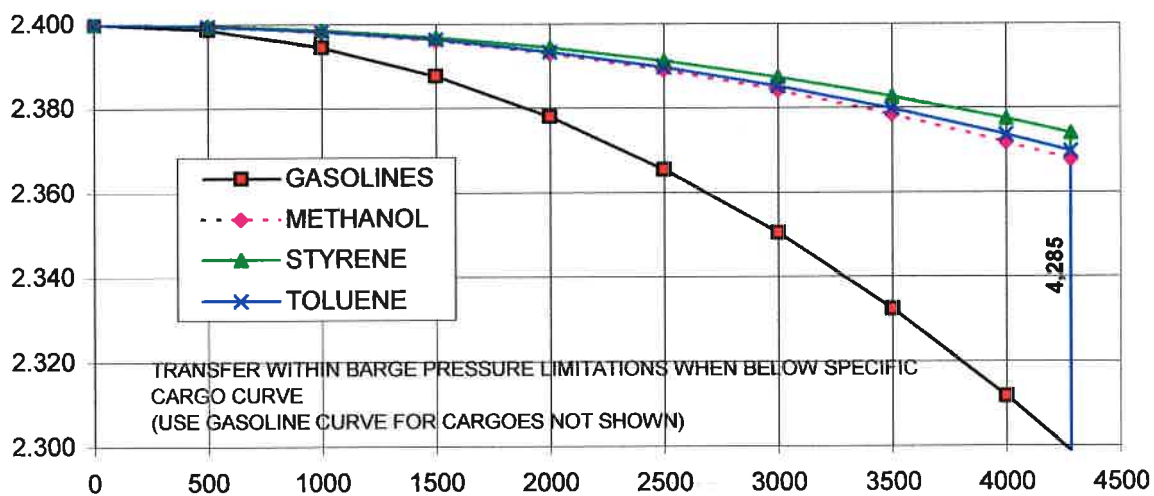


### PRESSURE DROP IN VCS PIPING



### LIQUID TRANSFER RATE VS FACILITY VAPOR CONNECTION PRESSURE





**Marine Safety Center Vapor Control System (VCS)  
Plan Review Information Sheet (PRIS)**



|                 |  |             |                   |
|-----------------|--|-------------|-------------------|
| Vessel Name     |  | Shipyard    | Jeffboat          |
| Official Number |  | Hull Number | 02-2965 & 02-2966 |

1. This sheet consolidates critical VCS parameters for MSC Staff Engineers and CG Field Inspectors dealing with Vapor Control Systems. CG Inspectors should verify the vessel's VCS design is consistent with the information listed in boxes 2, 6, 7 & 8 prior to updating the vapor control endorsement on the vessel's Certificate of Inspection. For cases where the information in the VCS PRIS does not reflect the vessel's design the CG Inspector should contact the MSC's Cargo Authority branch.

|                                                                 |       |                     |                                                  |                                     |
|-----------------------------------------------------------------|-------|---------------------|--------------------------------------------------|-------------------------------------|
| 2. Tank Maximum Design Working Pressure                         | 3.20  | psig                | Raised Trunk <input checked="" type="checkbox"/> | Flush Deck <input type="checkbox"/> |
| 3. Authorized Maximum Cargo Transfer Rate                       | 4285  | bbl/hr              |                                                  |                                     |
| 4. Authorized Maximum Cargo Vapor Density                       | 0.247 | lbm/ft <sup>3</sup> |                                                  |                                     |
| 5. Cargoes with the highest vapor density and/or pressure drop: |       |                     |                                                  |                                     |
| a. Cargo Name                                                   |       | Dodecylbenzene      |                                                  |                                     |
| b. Cargo Name                                                   |       | Gasoline            |                                                  |                                     |

|                                                         |                   |
|---------------------------------------------------------|-------------------|
| 6. Pressure Vacuum Valve:                               |                   |
| Manufacturer                                            | Bergen KLPH -6    |
| Size                                                    | 6 Inch            |
| CG Approval                                             | Yes               |
| Settings in psig:                                       |                   |
| Pressure-side                                           | 3                 |
| Vacuum-side                                             | 0.5               |
| Required Venting Capacity of Pressure-Side of P/V valve | 9191 bbl/hr (air) |
| Required Venting Capacity of Vacuum-Side of P/V valve   | 4285 bbl/hr (air) |

|                                                                     |                                     |      |   |                                                                  |
|---------------------------------------------------------------------|-------------------------------------|------|---|------------------------------------------------------------------|
| 7. Tank Overfill Protection System (check appropriate box or boxes) |                                     |      |   |                                                                  |
| a. High Level/Tank Overfill Alarm                                   | <input checked="" type="checkbox"/> | Type | 0 | Setting in psig<br>Meets ASTM F1271 <input type="checkbox"/> N/A |
| b. Overfill Control Shutdown                                        | <input checked="" type="checkbox"/> | Type | 0 |                                                                  |
| c. Spill Valve                                                      | <input type="checkbox"/>            | Type | 0 |                                                                  |
| d. Rupture Disk                                                     | <input type="checkbox"/>            | Type | 0 |                                                                  |

8. Closed Gauging      Verify the vessel has closed gauging that satisfies 46 CFR 39.20-3 and 151.15-10(c).

9. Instructions/Guidelines for the OCMI:

9a. The following is the Marine Safety Center's recommended COI endorsement

"Only those cargoes named in the vessel's Cargo Authority Attachment, Serial #C1-0204242, dated 07Jan03, may be carried and then only in the tanks indicated. In accordance with 46 CFR Part 39, excluding part 39.40, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letters Serial # C2-0203101 dated 12Sep02 and C1-0204242 dated 07Jan03, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column."

9b. The Marine Safety Center approval letter/s must be available at the OCMI's request.

9c. Verify isolation valve at the vapor connection flange is manually operable and designed in a way it is "clearly" open or closed.

9d. Previous applicable VCS approval letters:

|      |  |
|------|--|
| None |  |
|------|--|

VCS Approval Letter C1-0204242 dated 07Jan03

MSC Plan Reviewer LTJg Hsing-Yen Fu