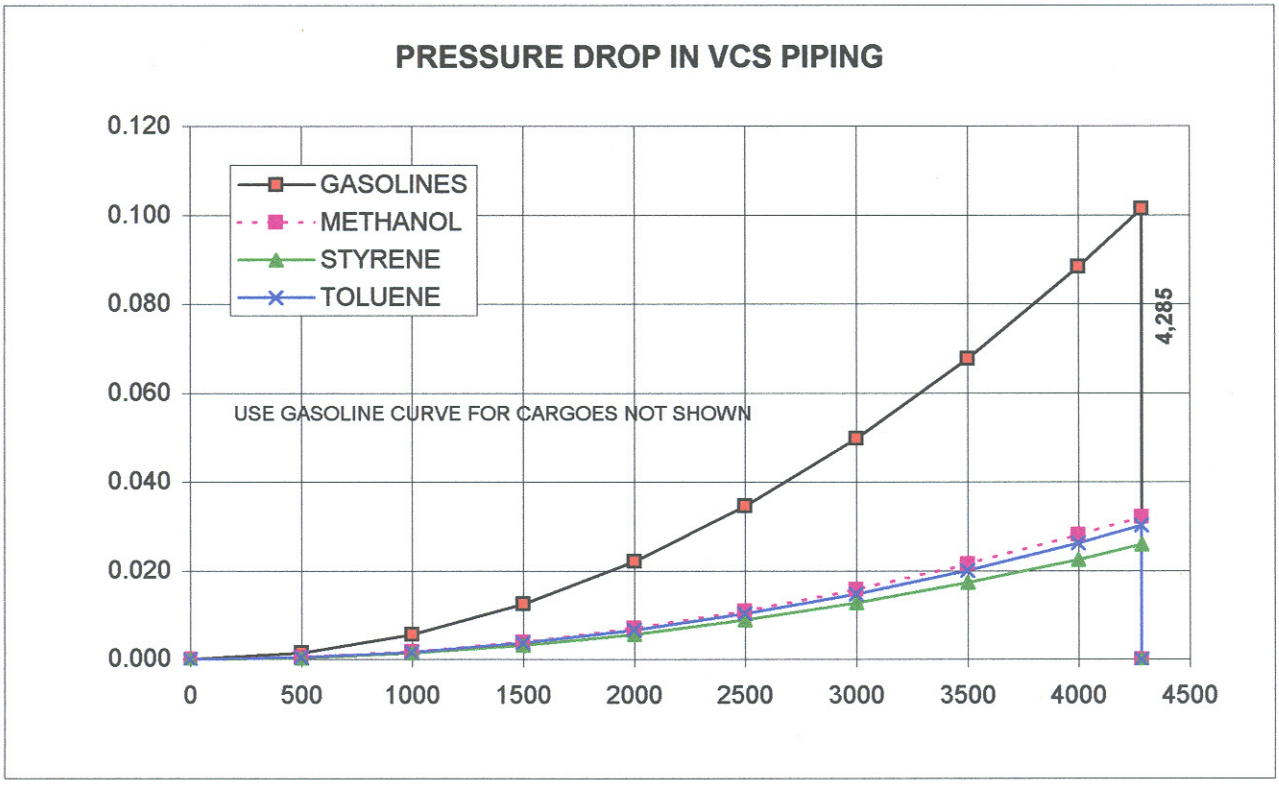
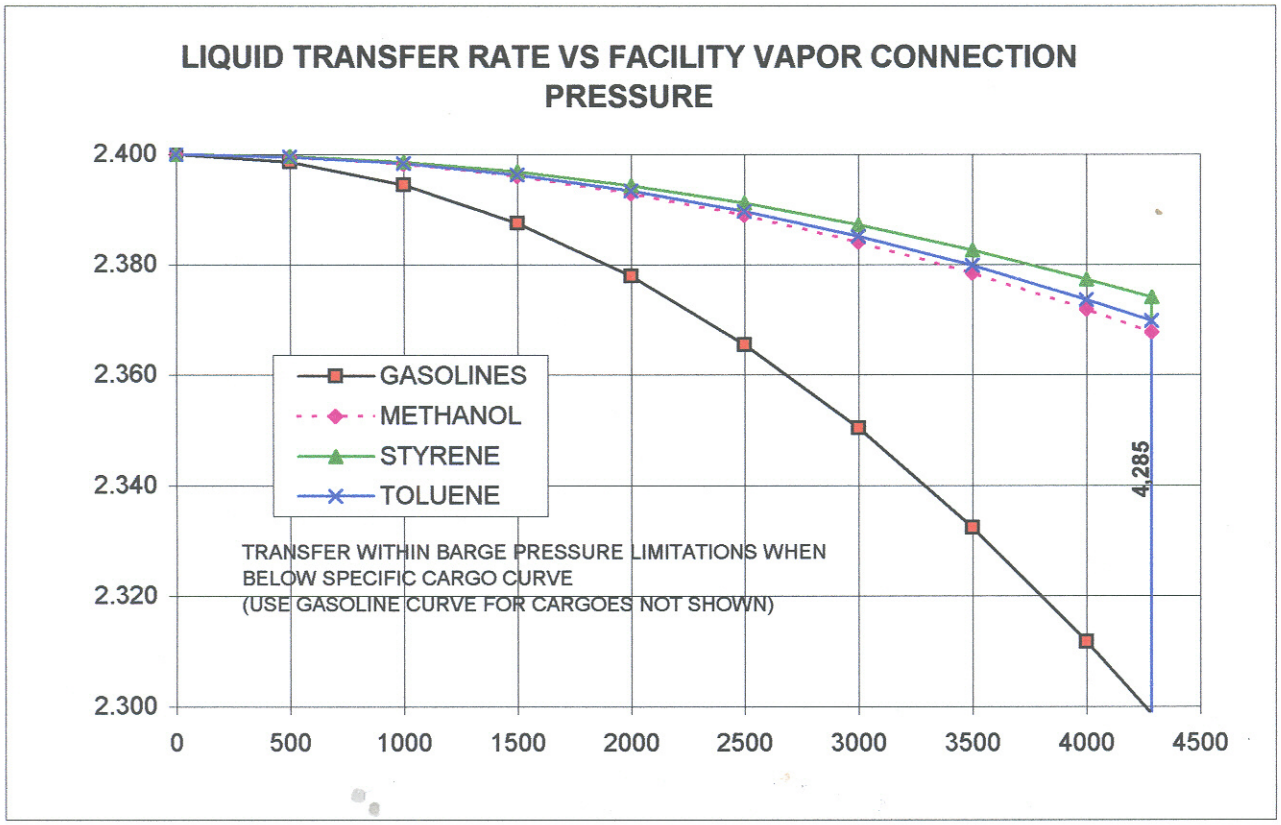

PRESSURE DROP IN VCS PIPING
0.120
0.100
0.080
0.060
0.040
0.020
0.000
0
500
1000
1500
2000
2500
3000
3500
4000
4500
GASOLINES
METHANOL
STYRENE
TOLUENE
USE GASOLINE CURVE FOR CARGOES NOT SHOWN
4,285


LIQUID TRANSFER RATE VS FACILITY VAPOR CONNECTION PRESSURE
2.400
2.380
2.360
2.340
2.320
2.300
0
500
1000
1500
2000
2500
3000
3500
4000
4500
GASOLINES
METHANOL
STYRENE
TOLUENE
TRANSFER WITHIN BARGE PRESSURE LIMITATIONS WHEN BELOW SPECIFIC CARGO CURVE
(USE GASOLINE CURVE FOR CARGOES NOT SHOWN)
4,285

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

Vessel Name	CBC 50 thru 61	Shipyard	Jeffboat
Official Number	1157175 thru 1157186	Hull Number	03-2152 thru 03-2163

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.

		Raised Trunk	X
2. Tank Maximum Design Working Pressure	3.56 psig	Flush Deck	
3. Authorized Maximum Cargo Transfer Rate	4285 bbl/hr		
4. Authorized Maximum Cargo Density	0.247 lbm/ft^3		
5. Authorized VCS Categories	1 thru 4		

6. Cargoes with the highest vapor density and/or pressure drop:
   a. Cargo Name: Dodecylbenzene
   b. Cargo Name: Gasoline

7. Pressure Vacuum Valve:

Manufacturer	BERGAN KLPH-6
Size	6 Inch
CG Approval	Yes

Settings in psig:

Pressure-side	3.0
Vacuum-side	0.5

8. VCS Pipe Sizes:

Approx. Inside Diameter	
Longitudinal Header (inches)	8
Transverse Header (Inches)	8

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)

9. Tank Overfill Protection System (check appropriate box or boxes)

a. High Level/Tank Overfill Alarm	X	Type	0		
b. Overfill Control Shutdown	X	Type	0		Setting in psig
c. Spill Valve		Type	0	Meets ASTM F1271	N/A
d. Rupture Disk		Type	0		

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

11. Instructions/Guidelines for the OCMI:

11a. The following is the Marine Safety Center's recommended COI endorsement:

"Only those cargoes named in the vessel's Cargo Authority Attachment, Serial #C2-0401495, dated 03Jun2004, 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 #C2-0401495, dated 03Jun2004, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column."

11b. The Marine Safety Center approval letter/s must be available at the OCMI's request.

11c. Verify isolation valve at the vapor connection flange is manually operable and designed in a way it is "clearly" open or closed.

11d. Previous applicable VCS approval letters:

None	

VCS Approval Letter: C2-0401495, dated 03Jun2004

MSC Plan Reviewer: LT Ray Lechner