

United States of America Department of Homeland Security United States Coast Guard

Certification Date: 22 Mar 2022 Expiration Date: 22 Mar 2027

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name

Official Number

IMO Number

Horsepower

Call Sign

Service

HTCO 3082

1236585

Tank Barge

Hailing Port

Hull Material

Propulsion

HOUSTON, TX

Steel

UNITED STATES

Place Built

Delivery Date

Keel Laid Date

Gross Tons

Net Tons

DWT

Length

ASHLAND CITY, TN

401 0040 0

PDec2011 R-1619

R-1619

R-297.5

10Jan2012 02Dec2011

.

.

. . .

UNITED STATES

Ownes

KIRBY INLAND MARINE LP 55 WAUGH DRIVE SUITE 1000 HOUSTON, TX 77007 UNITED STATES Operator

Kirby Inland Marine, LP 18350 MARKET ST CHANNELVIEW, TX 77530 UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Masters

0 Licensed Mates

0 Chief Engineers

0 Oilers

0 Chief Mates

0 First Class Pilots

0 First Assistant Engineers

0 Second Mates
0 Third Mates

0 Radio Officers0 Able Seamen

0 Second Assistant Engineers

0 Master First Class Pilot

0 Ordinary Seamen

0 Third Assistant Engineers0 Licensed Engineers

0 Mate First Class Pilots

0 Deckhands

0 Qualified Member Engineer

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:

---Lakes, Bays, and Sounds---

Also, in fair weather only, not more than twelve (12) miles from shore between St. Marks and Carrabelle, Florida.

This vessel has been granted a fresh water service examination interval in accordance with 46 CFR 31.10-21(a) (2). If this vessel is operated in salt water more than 6 months in any 12 month period, the vessel must be inspected using salt water intervals per 46 CFR 31.10-21(a) (1) and the cognizant OCMI notified in writing as soon as this change in status occurs.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Freeport, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Houston-Galveston certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

	Annual/Period	ic/Re-in	spection
Date	Zone	A/P/R	Signature
3/16/23	Houston	A	Hadrew Mil hard
3.19.24	HOUSTON	ρ	JAKE FRANCIS

Annual/Deriedia/Da I

This certificate issued by:

J. A. COLEMAN CDR, USCG, BY DIRECTION

Officer in Charge, Marine Inspection

Houston-Galveston

Inspection Zone



United States of America Department of Homeland Security **United States Coast Guard**

22 Mar 2022 Certification Date: 22 Mar 2027 **Expiration Date:**

Certificate of Inspection

Vessel Name: HTCO 3082

This tank barge is participating in the Eighth and Ninth Coast Guard District's Tank Barge Streamlined Inspection Program (TBSIP). Inspection activities aboard this barge shall be conducted in accordance with its Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to OCMI - Sector Houston-Galveston

---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

30Apr2028

26Apr2018

10Jan2012

Internal Structure

31Jan2027

22Mar2022

26Apr2018

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization:

GRADE A AND LOWER AND SPECIFIED HAZARDOUS CARGOES

Total Capacity

Units

Highest Grade Type Part151 Regulated Part153 Regulated

Part154 Regulated

29500

Barrels

Yes

No

No

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

Tank Number

Max Cargo Weight per Tank (short tons)

Maximum Density (lbs/gal)

1 P/S

925

13.57

2 P/S

939

13.57

3 P/S

851

13.57

Loading Constraints - Stability

Hull Type

Maximum Load

(short tons)

Maximum Draft

Max Density

Route Description

4697

(ft/in)

(lbs/gal)

R, LBS

11 111

5567

10ft 0in 11ft 9in 13.57 13.57

R, LBS

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial #C1-1103918, dated November 9, 2011, may be carried, and then only in the tanks indicated. When the vessel is carrying cargoes containing greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C are applied.

Per 46 CFR 150.130, the Person in Charge of the vessel is responsible for ensuring that the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the compatibility group numbers from the "Compat Group No" column listed in the vessel's CAA.

The maximum design density of cargo which may be filled to the tank top is 8.74 lbs/gal. Cargoes with higher densities, up to 13.57 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

Per 46 CFR 151.10-15(c)(2) the max tank weights reflect uniform (within 5%) loading at the deepest draft allowed. When carrying Subchapter O cargoes at shallower drafts, the barge(s) should always be loaded uniformly.

^{*}Vapor Control Authorization*



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In accordance with 46 CFR Part 39, excluding part 39.4000, this vessel's vapor collection system has been inspected to the plans approved by MSC Letter #C1-1103918 dated November 9, 2011 updated by MSC Letter #C1-1801701 dated May 2018 and has been found acceptable for the collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column. The VCS system has been approved with a pressure side of 3.0 psig P/V valve with Coast Guard Approval 167.017/167/4. The cargo tank top is suitable for a maximum allowable working pressure (MAWP) of 3.5 psig.

Per 46 CFR Part 39.1017 and 39.5000(e) this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved to tandem load with this vessel.

--- Inspection Status ---

Fuel Tanks

		222
Internal	Examir	nations

Tank ID	Previous	Last	Next
Machinery Deck	-	10Jan2012	-
Machinery Deck (Slop)	-	10Jan2012	
Machinery Deck (Slop Aft)	-	10Jan2012	-

Cargo Tanks

	Internal Exam	า		External Exar	m	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	10Jan2012	26Apr2018	30Apr2028	26Apr2018	22Mar2022	31Jan2027
2 P/S	10Jan2012	26Apr2018	30Apr2028	26Apr2018	22Mar2022	31Jan2027
3 P/S	10Jan2012	26Apr2018	30Apr2028	26Apr2018	22Mar2022	31Jan2027
			Hydro Test			
Tank Id	Safety Valve	S	Previous	Last	Next	
1 P/S	-		-	10Jan2012	-	
2 P/S	-		2	10Jan2012	-	
3 P/S			_	10Jan2012	-8	

--- Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
2	40-B

END

C1-1103918

09-Nov-11

Dated:



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: HTCO 3082

Official #: 1236585

Shipyard: Trinity Marine
Hull #: 4815

46 CFR 151 Tank	Group (Chara	cteris	tics													
Tank Group Information	Cargo I	dentificat	ion		Cargo		Tanks		Carg Tran		Enviror Control	nmental	Fire	Special Require	ments		
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg	Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50- 81(b),	55-1(c), (e), (h), 56- 1(b), (c), (d), (e), (f), (g),	NR	No

Notes: 1. Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.

- 2. Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.
- 3. Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

Cargo Identificatio	n							Condi	tions of Carriage	
							Vapor Re		_	
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Authorized Subchapter O Cargoes										
Acetonitrile	ATN	37	0	С	Ш	Α	Yes	3	No	G
Acrylonitrile	ACN	15 ²	0	С	Ш	Α	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	ADN	37	0	Е	Ш	Α	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 ²	0	NA	Ш	Α	No	N/A	.50-81, .50-86	G
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	П	Α	No	N/A	No	G
Benzene	BNZ	32	0	С	Ш	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 ²	0	С	Ш	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 ²	0	С	Ш	Α	Yes	1	.50-60, .56-1(b), (d), (f), (g)	G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	Ш	Α	Yes	1	.50-60	G
Butyl acrylate (all isomers)	BAR	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	ВМН	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	Ш	Α	Yes	1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	П	Α	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	Ш	Α	No	N/A	No	G
Chemical Oil (refined, containing phenolics)	COD	21	0	Е	П	Α	No	N/A	.50-73	G
Chlorobenzene	CRB	36	0	D	Ш	Α	Yes	1	No	G
Chloroform	CRF	36	0	NA	Ш	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	.50-73	G
Creosote	CCW	21 ²	0	Е	Ш	Α	Yes	1	No	G
Cresols (all isomers)	CRS	21	0	Ε	Ш	Α	Yes	1	No	G
Crotonaldehyde	CTA	19 ²	0	С	П	Α	Yes	4	.55-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	Ш	Α	No	N/A	No	G
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	0	Ε	Ш	Α	Yes	1	.56-1 (b)	G
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	Ш	Α	Yes	1	.50-60, .56-1(b)	G
iso-Decyl acrylate	IAI	14	0	Е	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G
1,1-Dichloroethane	DCH	36	0	С	Ш	Α	Yes	1	No	G
Dichloromethane	DCM	36	0	NA	Ш	Α	Yes	5	No	G
1,1-Dichloropropane	DPB	36	0	С	Ш	Α	Yes	3	No	G
1,2-Dichloropropane	DPP	36	0	С	III	Α	Yes	3	No	G
1,3-Dichloropropane	DPC	36	0	С	III	Α	Yes	3	No	G
1,3-Dichloropropene	DPU	15	0	D	Ш	Α	Yes	4	No	G
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	Ш	Α	Yes	1	No	G



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **HTCO 3082**Official #: 1236585

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Shipyard: Trinity Marine

Diethyandamine	Cargo Identification	n							Condi	tions of Carriage	
Debta polations		Cham	Comment	Cuk		יייים	Tork	<u> </u>		Special Peguiromento in 46 CED	1
Destination	Name				Grade						Period
Debty/sensitiamine	Diethanolamine	DEA	8	0	Е	III	Α	Yes	1	.55-1(c)	G
Discotroponalamine	Diethylamine	DEN	7	0	С	Ш	Α	Yes	3	.55-1(c)	G
Disport parametrial	Diethylenetriamine	DET	7 2	0	Е	Ш	Α	Yes	1	.55-1(c)	G
Disport	Diisobutylamine	DBU	7	0	D	Ш	Α	Yes	3	.55-1(c)	G
No.	Diisopropanolamine	DIP	8	0	Е	Ш	Α	Yes	1	.55-1(c)	G
March Marc	Diisopropylamine	DIA	7	0	С	П	Α	Yes	3	.55-1(c)	G
Demotry/formamide	N,N-Dimethylacetamide	DAC	10	0	Е	Ш	Α	Yes	3	.56-1(b)	G
DNA 7 0 C II A Yes 3 55-16 C Dobesyclimethylamine mixture DNA 7 0 C II A No NA 55-16 C Dobesyclimethylamine mixture DNA 7 0 C II A No NA 55-16 C C Dobesyclimethylamine mixture DNA 7 0 C II A No NA No No	Dimethylethanolamine	DMB	8	0	D	Ш	Α	Yes	1	.56-1(b), (c)	G
Dodesyldinethylamine, Tetradecyldimethylamine mixture	Dimethylformamide	DMF	10	0	D	Ш	Α	Yes	1	.55-1(e)	G
Deckey diphenyl ether disulfonate solution DOS 4	Di-n-propylamine	DNA	7	0	С	Ш	Α	Yes	3	.55-1(c)	G
Second path systems of the state of the st	Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	Ε	Ш	Α	No	N/A	.56-1(b)	G
Elmanolamina	Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	Ш	Α	No	N/A	No	G
Ethanolamine		EEG	40	0	D	III	Α	No	N/A	No	G
Ethyla crylate	•	MEA	8	0	Ε	Ш	Α	Yes	1	.55-1(c)	G
Ethylene dichloride EDA 7 2 0 0 0 111 A Yes 1 55-161 9 Ethylene dichloride EDC 36 2 0 0 C 111 A Yes 1 55-161 9 Ethylene glycol monoaltyl ethers EGC 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proyl ether EGP 40 0 D/E 111 A Yes 1 No 0 0 Ethylene glycol proylene glycol proy	Ethyl acrylate	EAC	14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethylene dichloride	Ethylene cyanohydrin	ETC	20	0	Е	Ш	Α	Yes	1	No	G
Ethylene dichloride		EDA	7 2	0	D	Ш	Α	Yes	1	.55-1(c)	G
Ethylene glycol hexyl ether		EDC	36 ²	0	С	Ш	Α	Yes	1	No	G
Ethylene glycol monoalkyl ethers EGC 40 0 0 E III A Yes 1 No 0 C Ethylene glycol propyl ether EGP 40 0 0 E III A Yes 1 No 0 G C C C C C C C C C		EGH		0	Е	Ш	Α	No	N/A	No	G
Ethylene glycol propyl ether		EGC	40	0	D/E	III	Α	Yes	1	No	G
2-Ethylnexyl acrylate		EGP	40	0	Е	Ш	Α	Yes	1	No	G
Ethyl methacrylate		EAI	14	0	Е	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
2-Ethyl-3-propylacrolein		ETM	14	0	D/E	Ш	Α	Yes	2	.50-70(a)	G
Formaldehyde solution (37% to 50%) FMS 19 2 O D/E III A Yes 1 55-1(h) G		EPA	19 ²	0	Е	Ш	Α	Yes	1	No	G
Furfural FFA 19 0 D III A Yes 1 55-1(h) G G G G G G G G G		FMS	19 ²	0	D/E	Ш	Α	Yes	1	.55-1(h)	G
Giutaraldehyde solution (50% or less) GTA 19 0 NA III A No NI/A No No G		FFA	19	0	D	III	Α	Yes	1	.55-1(h)	G
Hexamethylenediamine solution		GTA	19	0	NA	Ш	Α	No	N/A	No	G
Hexamethyleneimine HMI 7		HMC	7	0	Е	Ш	Α	Yes	1	.55-1(c)	G
Hydrocarbon 5-9		HMI	7	0	С	Ш	Α	Yes	1	.56-1(b), (c)	G
IPR 30 O A III A Yes 7 .50-70(a) .50-81(a) (b) G		HFN		0	С	Ш	Α	Yes	1	.50-70(a), .50-81(a), (b)	G
IPN		IPR	30	0	Α	Ш	Α	Yes	7	.50-70(a), .50-81(a), (b)	G
Mesityl oxide MSO 18 2		IPN		0					N/A	.50-70(a), .55-1(c)	G
Methyl acrylate MAM 14 O C III A Yes 2 .50-70(a), .50-81(a), (b) G Methyl cyclopentadiene dimer MCK 30 O C III A Yes 1 No G Methyl diethanolamine MDE 8 O E III A Yes 1 .56-1(b), (c) G 2-Methyl-5-ethylpyridine MEP 9 O E III A Yes 1 .55-1(e) G Methyl methacrylate MMM 14 O C III A Yes 2 .50-70(a), .50-81(a), (b) G 2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(e) G 2-Methylpyridine MPR 30 O D III A Yes 3 .55-1(e) G alpha-Methylstyrene MSR 30 O D III A Yes			18 ²	0							G
Methylcyclopentadiene dimer MCK 30 O C III A Yes 1 No G Methyl diethanolamine MDE 8 O E III A Yes 1 .56-1(b), (c) G 2-Methyl-5-ethylpyridine MEP 9 O E III A Yes 1 .55-1(e) G Methyl methacrylate MMM 14 O C III A Yes 1 .55-1(e) G 2-Methylpyridine MPR 9 O D III A Yes 2 .50-70(a), .50-81(a), (b) G 2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(c) G alpha-Methylstyrene MSR 30 O D III A Yes 1 .55-1(c) G Northyloridine MPL 7 2 O D III A Yes 1										.50-70(a), .50-81(a), (b)	G
Methyl diethanolamine MDE 8 O E III A Yes 1 .56-1(b). (c) G 2-Methyl-5-ethylpyridine MEP 9 O E III A Yes 1 .55-1(e) G Methyl methacrylate MMM 14 O C III A Yes 2 .50-70(a)50-81(a). (b) G 2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(c) G alpha-Methylstyrene MSR 30 O D III A Yes 2 .50-70(a)50-81(a). (b) G Morpholine MPL 7 2 O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1-or 2-Nitropropane NPM 42 O D III A Yes										No	G
2-Methyl-5-ethylpyridine MEP 9 O E III A Yes 1 .55-1(e) G Methyl methacrylate MMM 14 O C III A Yes 2 .50-70(a), .50-81(a), (b) G 2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(c) G alpha-Methylstyrene MSR 30 O D III A Yes 2 .50-70(a), .50-81(a), (b) G Morpholine MPL 7 ° O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81 G 1,3-Pentadiene PDE 30 O A III A No N/A <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>.56-1(b), (c)</td> <td>G</td>										.56-1(b), (c)	G
Methyl methacrylate MMM 14 O C III A Yes 2 .50-70(a), .50-81(a), (b) G 2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(c) G alpha-Methylstyrene MSR 30 O D III A Yes 2 .50-70(a), .50-81(a), (b) G Morpholine MPL 7 ° O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81 G 1,3-Pentadiene PDE 30 O A III A Yes 7 .50-70(a), .50-81 G Perchloroethylene PER 36 O NA III A Yes 1<										.55-1(e)	G
2-Methylpyridine MPR 9 O D III A Yes 3 .55-1(c) G alpha-Methylstyrene MSR 30 O D III A Yes 2 .50-70(a). 50-81(a). (b) G Morpholine MPL 7 ° O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81, .56-1(b) G 1,3-Pentadiene PDE 30 O A III A Yes 7 .50-70(a), .50-81 G Perchloroethylene PER 36 O NA III A Yes 7 .50-70(a), .50-81 G Polyethylene polyamines PER 36 O NA III A Yes										.50-70(a), .50-81(a), (b)	G
alpha-Methylstyrene MSR 30 O D III A Yes 2 .50-70(a), .50-81(a), (b) G Morpholine MPL 7 ° 2 O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D III A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81 G 1,3-Pentadiene PDE 30 O A III A Yes 7 .50-70(a), .50-81 G Perchloroethylene PER 36 O NA III A No N/A No G Polyethylene polyamines PEB 7 ° 2 O E III A Yes 1 .55-1(c) G iso-Propanolamine MPA 8 O E III A Yes 1	•									.55-1(c)	G
Morpholine MPL 7 2 O D III A Yes 1 .55-1(c) G Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81 G 1,3-Pentadiene PDE 30 O A III A Yes 7 .50-70(a), .50-81 G Perchloroethylene PER 36 O NA III A No N/A No N G Polyethylene polyamines PEB 7 2 O E III A Yes 1 .55-1(c) G iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G	***									.50-70(a), .50-81(a), (b)	G
Nitroethane NTE 42 O D II A No N/A .50-81, .56-1(b) G 1- or 2-Nitropropane NPM 42 O D III A Yes 1 .50-81 G 1,3-Pentadiene PDE 30 O A III A Yes 7 .50-70(a), .50-81 G Perchloroethylene PER 36 O NA III A No N/A No No G Polyethylene polyamines PEB 7 2 O E III A Yes 1 .55-1(c) G iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G										.55-1(c)	G
1- or 2-Nitropropane	· · ·										
1,3-Pentadiene PDE 30 O A III A Yes 7 50-70(a). 50-81 G Perchloroethylene PER 36 O NA III A No N/A No G Polyethylene polyamines PEB 7 2 O E III A Yes 1 .55-1(e) G iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G											
Perchloroethylene PER 36 O NA III A No N/A No G Polyethylene polyamines PEB 7 ° O E III A Yes 1 .55-1(e) G iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G											
Polyethylene polyamines PEB 7 ² O E III A Yes 1 .55-1(e) G iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G											
iso-Propanolamine MPA 8 O E III A Yes 1 .55-1(c) G											
304 Topunoumino											
Propagation upon n 1 PAX A D P III A Vac 1 JULIU III III	Propanolamine (iso-, n-)	PAX	8	0	E	III	A	Yes	1	.56-1(b), (c)	G



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: HTCO 3082 Official #: 1236585

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Shipyard: Trinity Marine

Serial #: C1-1103918

09-Nov-11

Cargo Identification	n					Conditions of Carriage						
	Chem	Compat	Sub		Hull	Tank	Vapor R App'd	Recovery VCS	Special Requirements in 46 CFR	Insp.		
Name	Code	Group No	Chapter	Grade	Туре	Group		Category	151 General and Mat'ls of	Period		
iso-Propylamine	IPP	7	0	Α	Ш	Α	Yes	5	.55-1(c)	G		
Pyridine	PRD	9	0	С	III	Α	Yes	1	.55-1(e)	G		
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	Ш	Α	No	N/A	.50-73	G		
Styrene (crude)	STX		0	D	III	Α	Yes	2	No	G		
Styrene monomer	STY	30	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	Ш	Α	No	N/A	No	G		
Tetraethylenepentamine	TTP	7	0	Ε	Ш	Α	Yes	1	.55-1(c)	G		
Tetrahydrofuran	THF	41	0	С	Ш	Α	Yes	1	.50-70(b)	G		
1,2,4-Trichlorobenzene	TCB	36	0	Ε	Ш	Α	Yes	1	No	G		
Trichloroethylene	TCL	36 ²	0	NA	Ш	Α	Yes	1	No	G		
Triethylamine	TEN	7	0	С	Ш	Α	Yes	3	.55-1(e)	G		
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	Ш	Α	No	N/A	.56-1(b)	G		
Vinyl acetate	VAM	13	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Vinyl neodecanate	VND	13	0	Е	Ш	Α	No	N/A	.50-70(a), .50-81(a), (b)	G		
Subabantar D. Carragas Authorized for Vanor Contr	ما											
Subchapter D Cargoes Authorized for Vapor Contractions Acetone	ACT	18 ²	D	С		A	Yes	1				
Acetophenone	ACP	18	D	E		A	Yes	1				
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		A	Yes	1				
71 77 7	AEB	20	D	E		A	Yes	1				
And acetes (all icomors)	AEC	34	D	D		A	Yes	1				
Amyl acetate (all isomers)	AAI			D								
Amyl alcohol (iso-, n-, sec-, primary)		20	D			Α	Yes	1				
Benzyl alcohol	BAL	21	D	E E		Α	Yes	1				
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		Α	Yes	1				
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1				
Butyl alcohol (iso-)	IAL	20 ²	D	D		Α	Yes	1				
Butyl alcohol (n-)	BAN	20 ²	D	D		Α	Yes	1				
Butyl alcohol (sec-)	BAS	20 ²	D	С		Α	Yes	1				
Butyl alcohol (tert-)	BAT		D	С		Α	Yes	1				
Butyl benzyl phthalate	BPH	34	D	Е		Α	Yes	1				
Butyl toluene	BUE	32	D	D		Α	Yes	1				
Caprolactam solutions	CLS	22	D	Е		Α	Yes	1		=		
Cyclohexane	CHX	31	D	С		Α	Yes	1				
Cyclohexanol	CHN	20	D	Е		Α	Yes	1				
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		Α	Yes	2				
p-Cymene	CMP	32	D	D		Α	Yes	1				
iso-Decaldehyde	IDA	19	D	Е		Α	Yes	1				
n-Decaldehyde	DAL	19	D	Е		Α	Yes	1				
Decene	DCE	30	D	D		Α	Yes	1				
Decyl alcohol (all isomers)	DAX	20 ²	D	E		Α	Yes	1				
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Α	Yes	1				
Diacetone alcohol	DAA	20 ²	D	D		Α	Yes	1				
ortho-Dibutyl phthalate	DPA	34	D	Е		Α	Yes	1				
Diethylbenzene	DEB	32	D	D		Α	Yes	1				
Diethylene glycol	DEG	40 ²		E		Α	Yes	1				
Diisobutylene	DBL	30	D	С		Α	Yes	1				
Diisobutyl ketone	DIK	18	D	D		Α	Yes	1				



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **HTCO 3082**Official #: 1236585

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Shipyard: Trinity Marine

Cargo Identification	n					Conditions of Carriage						
	Chem	Compat	Sub		Hull	Tank	App'd	Recovery VCS	Special Requirements in 46 CFR	Insp.		
Name	Code	Group No	Chapter	Grade	Type	Group	(Y or N)	Category	151 General and Mat'ls of	Period		
Diisopropylbenzene (all isomers)	DIX	32	D	Е		Α	Yes	1				
Dimethyl phthalate	DTL	34	D	E		Α	Yes	1				
Dioctyl phthalate	DOP	34	D	Е		Α	Yes	1				
Dipentene	DPN	30	D	D		Α	Yes	1				
Diphenyl	DIL	32	D	D/E		Α	Yes	1				
Diphenyl, Diphenyl ether mixtures	DDO	33	D	E		Α	Yes	1				
Diphenyl ether	DPE	41	D	{E}		Α	Yes	1				
Dipropylene glycol	DPG	40	D	E		Α	Yes	1				
Distillates: Flashed feed stocks	DFF	33	D	E		Α	Yes	1				
Distillates: Straight run	DSR	33	D	E		Α	Yes	1				
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1				
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		Α	Yes	1				
2-Ethoxyethyl acetate	EEA	34	D	D		Α	Yes	1				
Ethoxy triglycol (crude)	ETG	40	D	Е		Α	Yes	1				
Ethyl acetate	ETA	34	D	С		Α	Yes	1				
Ethyl acetoacetate	EAA	34	D	Е		Α	Yes	1				
Ethyl alcohol	EAL	20 ²	D	С		Α	Yes	1				
Ethylbenzene	ETB	32	D	С		Α	Yes	1				
Ethyl butanol	EBT	20	D	D		Α	Yes	1				
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1				
Ethyl butyrate	EBR	34	D	D		Α	Yes	1				
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1				
Ethylene glycol	EGL	20 ²	D	Е		Α	Yes	1				
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1				
Ethylene glycol diacetate	EGY	34	D	Е		Α	Yes	1				
Ethylene glycol phenyl ether	EPE	40	D	Е		Α	Yes	1				
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes	1				
2-Ethylhexanol	EHX	20	D	Е		Α	Yes	1				
Ethyl propionate	EPR	34	D	С		Α	Yes	1				
Ethyl toluene	ETE	32	D	D		Α	Yes	1				
Formamide	FAM	10	D	E		Α	Yes	1				
Furfuryl alcohol	FAL	20 ²	D	E		Α	Yes	1				
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1				
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1				
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		Α	Yes	1				
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С		Α	Yes	1				
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1				
Gasolines: Polymer	GPL	33	D	A/C		Α	Yes	1				
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1				
Glycerine	GCR	20 ²	D	Е		Α	Yes	1				
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1				
Heptanoic acid	HEP	4	D	E		Α	Yes	1		-		
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1				
Heptene (all isomers)	HPX	30	D	С		Α	Yes	2				
Heptyl acetate	HPE	34	D	Е		Α	Yes	1				
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 ²	D	B/C		Α	Yes	1				
Hexanoic acid	НХО	4	D	Е		Α	Yes	1				



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **HTCO 3082**Official #: 1236585

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Shipyard: Trinity Marine

Cargo Identification	<u> </u>							Condi	tions of Carriage	
								Recovery		
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Hexanol	HXN	20	D	D		Α	Yes	1		
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2		
Hexylene glycol	HXG	20	D	Е		Α	Yes	1		
Isophorone	IPH	18 ²	D	Е		Α	Yes	1		
Jet fuel: JP-4	JPF	33	D	Е		Α	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		Α	Yes	1		
Kerosene	KRS	33	D	D		Α	Yes	1		
Methyl acetate	MTT	34	D	D		Α	Yes	1		
Methyl alcohol	MAL	20 ²	D	С		Α	Yes	1		
Methylamyl acetate	MAC	34	D	D		Α	Yes	1		
Methylamyl alcohol	MAA	20	D	D		Α	Yes	1		
Methyl amyl ketone	MAK	18	D	D		Α	Yes	1		
Methyl tert-butyl ether	MBE	41 2	D	С		Α	Yes	1		
Methyl butyl ketone	MBK	18	D	С		Α	Yes	1		
Methyl butyrate	MBU	34	D	С		Α	Yes	1		
Methyl ethyl ketone	MEK	18 ²	D	С		Α	Yes	1		
Methyl heptyl ketone	MHK	18	D	D		Α	Yes	1		
Methyl isobutyl ketone	MIK	18 ²	D	С		A	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	E		A	Yes	1		
Mineral spirits	MNS	33	D	D		A	Yes	1		
Myrcene	MRE	30	D	D		A	Yes	1		
Naphtha: Heavy	NAG	33	D	#		A	Yes	1		
Naphtha: Petroleum	PTN	33	D	#		A	Yes	1		
Naphtha: Solvent	NSV	33	D	<i>"</i>		A	Yes	1		
Naphtha: Stoddard solvent	NSS	33	D	D		A	Yes	1		
Naphtha: Varnish makers and painters (75%)	NVM	33	D	С		A	Yes	1		
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes	1		
Nonene (all isomers)	NON	30	D	D		A	Yes	2		
,	NNS	20 ²	D	E		A	Yes	1		
Nonyl alcohol (all isomers) Nonyl phenol	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		A	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		A	Yes	1		
	OAY	4	D	E		A	Yes	1		
Octanoic acid (all isomers)	OCX	20 ²	D	E		A	Yes	1		
Octanol (all isomers)	OTX	30	D	C		A	Yes	2		
Octene (all isomers)	OTW	33	D	D/E			Yes	1		
Oil, fuel: No. 2	OTD	33	D	D/E		A	Yes	1		
Oil, fuel: No. 2-D	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 4	OFV									
Oil, fuel: No. 5		33	D	D/E		Α .	Yes	1		
Oil, fuel: No. 6	OSX	33	D	E C/D		Α .	Yes	1		
Oil, misc: Crude	OIL	33	D	C/D		Α	Yes	1		
Oil, misc: Diesel	ODS	33	D	D/E		Α	Yes	1		
Oil, misc: Gas, high pour	OGP	33	D	E		A	Yes	1		
Oil, misc: Lubricating	OLB	33	D	E		Α	Yes	1		
Oil, misc: Residual	ORL	33	D	E		Α	Yes	1		
Oil, misc: Turbine	OTB	33	D	E		A	Yes	1		
Pentane (all isomers)	PTY	31	D	A		Α	Yes	5		
Pentene (all isomers)	PTX	30	D	Α		Α	Yes	5		



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **HTCO 3082** Official #: 1236585

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Shipyard: Trinity Marine

Hull #: 4815

Cargo Identifica	tion					Conditions of Carriage						
	Observe	0	O. It		115.00	TI-		Recovery	On a sial Danishamanta in 40 OFD			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1				
alpha-Pinene	PIO	30	D	D		Α	Yes	1				
beta-Pinene	PIP	30	D	D		Α	Yes	1				
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	Е		Α	Yes	1				
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	Е		Α	Yes	1				
Polybutene	PLB	30	D	E		Α	Yes	1				
Polypropylene glycol	PGC	40	D	E		Α	Yes	1				
iso-Propyl acetate	IAC	34	D	С		Α	Yes	1				
n-Propyl acetate	PAT	34	D	С		Α	Yes	1				
iso-Propyl alcohol	IPA	20 ²	D	С		Α	Yes	1				
n-Propyl alcohol	PAL	20 ²	D	С		Α	Yes	1				
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1				
iso-Propylcyclohexane	IPX	31	D	D		Α	Yes	1				
Propylene glycol	PPG	20 ²	D	Е		Α	Yes	1				
Propylene glycol methyl ether acetate	PGN	34	D	D		Α	Yes	1				
Propylene tetramer	PTT	30	D	D		Α	Yes	1				
Sulfolane	SFL	39	D	Е		Α	Yes	1				
Tetraethylene glycol	TTG	40	D	Е		Α	Yes	1				
Tetrahydronaphthalene	THN	32	D	Е		Α	Yes	1				
Toluene	TOL	32	D	С		Α	Yes	1				
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Е		Α	Yes	1				
Triethylbenzene	TEB	32	D	Е		Α	Yes	1				
Triethylene glycol	TEG	40	D	Е		Α	Yes	1				
Triethyl phosphate	TPS	34	D	Е		Α	Yes	1				
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1				
Trixylenyl phosphate	TRP	34	D	Е		Α	Yes	1				
Undecene	UDC	30	D	D/E		Α	Yes	1				
1-Undecyl alcohol	UND	20	D	Е		Α	Yes	1				
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		Α	Yes	1				

Certificate of Inspection Cargo Authority Attachment

Vessel Name: HTCO 3082 Shipyard: Trinity Marine Official #: 1236585 Hull #: 4815

Explanation of terms & symbols used in the Table:

Cargo Identification

Chem Code none

Note 1

The proper shipping name as listed in 46 CFR Table 30.25-1, 46 CFR Table 151.05, and 46 CFR Part 153 Table 2 The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual.

Certain mixtures of cargoes may not have a CHRIS Code assigned.

Compatability Group No

The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 46 CFR Part 150 are met. Cargoes must be checked for compatibility using the figures, tables and appendices of 46 CFR 150 in conjunction with the assigned reactive group number.

Note 2

Because of the very high reactivity or unusual conditions of carriage or potential compatibility problems, this product is not assigned to a specific group in the Compatibility Chart. For additional compatibility information, contact Commandant (CG-3PSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Telephone

See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart.

Subchapter Subchapter D Subchapter O

Grade

The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified. Those flammable and combustible liquids listed in 46 CFR Table 30.25-1

Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2. Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges

The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of

ABC Flammable liquid cargoes, as defined in 46 CFR 30-10.22 Combustible liquid cargoes, as defined in 46 CFR 30-10.15. D, E Note 4

The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.

Those subchapter O cargoes which are not classified as a flammable or combustible liquid.

No flammability/combustibility grade has been assigned yet as the necessary flash point/vapor pressure data for such assignments are presently not available

Hull Type

NA

The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1. Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1).

Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3). Designed to carry products of sufficeint hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).

Not applicable to barges certificated under Subchapter D

Conditions of Carriage

Tank Group Vapor Recovery Approved (Y or N) The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.

Conditions of Carriage

Vapor Recovery Approved (Ý or N) The vessel's tank group (as defined under the "46 CFR Tank Group Characteristics" listed on page 1) which is authorized for carriage of the named cargo

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo

VCS Category: Category 1 The specified cargo's provisional classification for vapor control systems.

This requirement is in addition to the requirements of Category 1

(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates.

Category 2

(Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety componenets and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation arrester.

Category 3

(Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overfill protection requirement of 46 CFR 39.20-9.

Category 4

(Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3,

Category 5

(High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.

Category 6

(High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5, (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5

Category 7

The cargo has not been evaluated/classified for use in vapor control systems.