

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

Certification Date: 15 Apr 2024 Expiration Date: 15 Apr 2029

Certificate of Inspection

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

		Officia	l Number	IMO Nun	nber	Call Sign	Service	
KIRBY 30034		121	6339				Tank B	arge
Hailing Port			Hull Material	Hon	sepower	Propulsion		
GIBSON, LA			Steel	1101	iopuno.	T Topalolol		
UNITED STATE	ES							
Place Built			Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
MADISONVILL	E, LA	2	28Jan2009	09Dec2008	R-1619	R-1619		R-297.5
UNITED STATI	ES							
Owner AND	MADINE			Opera		MADINE LD		
KIRBY INLAND 55 WAUGH DR					50 MARKET	MARINE, LP		
HOUSTON, TX					ANNELVIEV			
JNITED STATE	ES			UN	TED STATE	S		
This vessel mus Certified Lifeb							hich there m	ust be
0 Masters	01	Licensed Mates	0 Chief	Engineers	0.0)ilers		Line Well
0 Chief Mates	01	First Class Pilots	0 First	Assistant Engine	ers			
0 Second Mates	01	Radio Officers	0 Seco	nd Assistant Eng	gineers			
	0,	Able Seamen	0 Third	Assistant Engin	eers			
0 Third Mates								
0 Third Mates 0 Master First C		Ordinary Seamer		sed Engineers				
0 Master First C 0 Mate First Cla	ss Pilots 0	Deckhands	0 Quali	fied Member En	4.63	TO LETTE TO		
0 Master First C 0 Mate First Cla In addition, this	vessel may ca	Deckhands	0 Quali	fied Member En	4.63	ons in addition t	o crew, and ı	no Others. Total
0 Master First C 0 Mate First Cla In addition, this	vessel may ca d: 0	Deckhands rry 0 Passeng	0 Quali jers, 0 Othe	fied Member En	4.63	ons in addition t	o crew, and ı	no Others. Total
0 Master First C 0 Mate First Cla In addition, this Persons allowe Route Permit	vessel may ca d: 0 ted And Cond	Deckhands rry 0 Passeng itions Of Ope	0 Quali jers, 0 Othe eration:	ified Member En	rew, 0 Perso	ons in addition t	o crew, and ı	no Others. Total
0 Master First Co 0 Mate First Cla In addition, this Persons allowe Route PermittLakes, B	vessel may ca d: 0 ted And Cond ays, and Se	Deckhands rry 0 Passeng itions Of Ope ounds plu	0 Quali gers, 0 Othe eration: s Limited	d Coastwi	rew, 0 Perso			
0 Master First Co 0 Mate First Cla In addition, this Persons allower Route PermittLakes, B. Also, in fair Florida. This vessel havessel is open salt water interest.	vessel may ca d: 0 ted And Cond ays, and Se weather only as been grant rated in salt tervals per 4	Deckhands rry 0 Passeng itions Of Ope ounds plu , not more t ed a fresh v water more	0 Qualifiers, 0 Other eration: S Limited than twelve than 6 more	d Coastwine (12) miles	se from shore ion interva	between St. 1 per 46 CFR riod, the ves	Marks and Co 31.10-21(a) sel must be	arrabelle, (2). If this inspected usin
0 Master First Co 0 Mate First Cla In addition, this Persons allowe Route Permitt Lakes, B Also, in fair Florida. This vessel havessel is open salt water interchange in state	vessel may ca d: 0 ted And Cond ays, and So weather only as been grant rated in salt tervals per 4 tus occurs.	rry 0 Passeng itions Of Ope ounds plu , not more t ed a fresh v water more 6 CFR 31.10-	o Qualifers, 0 Other eration: s Limited than twelves than 6 more 21(a) (1) a	d Coastwine (12) miles ice examinate this in any and the cogn	from shore ion interva 2 month pe	between St. l per 46 CFR riod, the ves notified in w	Marks and Co 31.10-21(a) sel must be riting as so	arrabelle, (2). If this inspected usin
0 Master First Co 0 Mate First Cla In addition, this Persons allowe Route PermittLakes, B. Also, in fair Florida. This vessel havessel is open salt water interpretable in state This tank bare ***SEE NEXT	vessel may ca d: 0 ted And Cond ays, and So weather only as been grant rated in salt tervals per 4 tus occurs. ge is partici	pating in th	o Qualities, O Other peration: s Limited than twelve than 6 more 21(a) (1) and the Eighth C	d Coastwine (12) miles ice examinate this in any and the cogn	from shore ion interva 12 month pe izant OCMI District's	between St. l per 46 CFR riod, the ves notified in w Tank Barge St	Marks and Co 31.10-21(a) sel must be riting as so reamlined I	arrabelle, (2). If this inspected usin oon as this nspection Progr
0 Master First Co 0 Mate First Cla In addition, this Persons allower Route PermittLakes, B. Also, in fair Florida. This vessel havessel is open salt water interpretable in start this tank bard ***SEE NEXT With this Inspection, Mar	vessel may ca d: 0 ted And Cond ays, and So weather only as been grant rated in salt tervals per 4 tus occurs. ge is partici T PAGE FOR ction for Certificine Safety Unit	pating in the ADDITIONAL cation having the Port Arthur of Passengers of the Port Arthur of the Passengers of the Passeng	o Qualities, 0 Other peration: s Limited than twelve than 6 more 21(a) (1) and the Eighth (1) the Eighth (2) the Eighth (3) the Eighth (4) the Eighth (5) the Eighth (6) t	d Coastwine (12) miles ice examinat hiths in any and the cogn coast Guard CATE INFORMET (12) teted at Port Avessel, in all reserves to the company of the cost of	from shore ion interva 12 month pe izant OCMI District's RMATION**	between St. l per 46 CFR riod, the ves notified in w Tank Barge St	Marks and Constant of State of Marks and Constant of State of Stat	arrabelle, (2). If this inspected using on as this inspection Program in Charge, Marin
0 Master First Co 0 Mate First Cla In addition, this Persons allower Route PermittLakes, B. Also, in fair Florida. This vessel havessel is open salt water inchange in star This tank bard ***SEE NEXT With this Inspection, Mar	vessel may ca d: 0 ted And Cond ays, and S weather only as been grant rated in salt tervals per 4 tus occurs. ge is partici TPAGE FOR ction for Certific ine Safety Unit les and regulat	pating in the ADDITIONAl cation prescribes	o Qualities, 0 Other peration: s Limited than twelve than 6 more 21(a) (1) a me Eighth (1) been completely there and there and there and there are the second the second there are the second the sec	d Coastwine (12) miles ice examinat in any and the cognicant CATE INFORMATE	from shore ion interva 12 month pe izant OCMI District's RMATION** Arthur, TX, U espects, is in	between St. 1 per 46 CFR riod, the ves notified in w Tank Barge St	Marks and Constant of State of Marks and Constant of State of Stat	arrabelle, (2). If this inspected using on as this inspection Program in Charge, Marin
0 Master First Co 0 Mate First Cla In addition, this Persons allower Route PermittLakes, B. Also, in fair Florida. This vessel havessel is open salt water into change in state This tank bard ***SEE NEXT With this Inspect	vessel may ca d: 0 ted And Cond ays, and S weather only as been grant rated in salt tervals per 4 tus occurs. ge is partici TPAGE FOR ction for Certific ine Safety Unit les and regulat	pating in the ADDITIONAL cation having the Port Arthur of Passengers of the Port Arthur of the Passengers of the Passeng	o Qualities, 0 Other peration: s Limited than twelve than 6 more 21(a) (1) a me Eighth (1) been completely there and there and there and there are the second the second there are the second the sec	d Coastwine (12) miles ice examinat hiths in any and the cogn coast Guard CATE INFOR letted at Port Avessel, in all reer.	from shore from shore ion interva 12 month pe izant OCMI District's RMATION** Arthur, TX, U espects, is in	between St. l per 46 CFR riod, the ves notified in w Tank Barge St	Marks and Co 31.10-21(a) sel must be riting as so reamlined I S, the Office h the applical	arrabelle, (2). If this inspected usin boon as this inspection Program in Charge, Marin ble vessel inspect

Marine Safety Unit Port Arthur

Inspection Zone



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

Certification Date: 15 Apr 2024 **Expiration Date:** 15 Apr 2029

Certificate of Inspection

Vessel Name: KIRBY 30034

(TBSIP). Inspection activities aboard this barge shall be conducted per its Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to OCMI Houston-Galveston

---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

28Feb2029

25Feb2019

28Jan2009

Internal Structure

30Apr2029

15Apr2024

20Feb2019

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

Authorization:

FLAMMABLE/COMBUSTIBLE LIQUIDS AND SPECIFIED HAZARDOUS CARGOES

Total Capacity

Units

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

29700

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	816	13.6
2 P/S	816	13.6
3 P/S	829	13.6

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
II	3815	10ft 0in	13.6	LBS
10	4687	11ft 9in	13.6	LBS

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA) serial# C2-0803458, dated 24 Nov 08, and Grade A and lower cargoes may be carried.

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

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 39, excluding Part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by Marine Safety Center letter serial # C2-0803458 dated 24 Nov 08 and Serial # C1-0803386 dated 18 Nov 08, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Per 46 CFR 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.

Per 46 CFR 151.10(c)(2), the maximum tank weights listed above reflect uniform (within 5%) loading at the deepest draft

^{*}Vapor Control Authorization*

^{*}Stability and Trim*



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

Certification Date: 15 Apr 2024 Expiration Date: 15 Apr 2029

Certificate of Inspection

Vessel Name: KIRBY 30034

allowed. When carrying Subchapter "O" cargoes at shallower drafts, the barge should always be loaded uniformly.

The maximum design density of cargo which may be filled to the tank top is 8.745 lbs/gal. Cargoes with higher densities, up to 13.6 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

--- Inspection Status ---

Cargo Tanks

	Internal Exam			External Exa	am	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	28Jan2009	20Feb2019	28Feb2029	-		- 4
2 P/S	28Jan2009	20Feb2019	28Feb2029	×-747/17	-	
3 P/S	28Jan2009	20Feb2019	28Feb2029	-	-	
			Hydro Test			
Tank Id	Safety Valves	5	Previous	Last	Next	
1 P/S	-					
2 P/S	-			7 <u>.</u> 22-14	12 20	
3 P/S				NO LIKE IT IN	37	

---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

40-B

END



Serial #: C2-0803458 Dated: 24-Nov-08

D.

Certificate of Inspection

Cargo Authority Attachment

Shipyard: TRINITY
Hull #: 2177-3

Official #: 1216339

Tank Group Information	Cargo li	dentificati	ion		Carre		Tanks		Carg		Enviror	nmental	Fire	Special Require	ments		
Trik Grp Tanks in Group	Density	Press.	Temp.	Hull Typ		Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec T Haz C	
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	0	1ii 2ii	Integral Gravity	PV	Closed	U	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50- 81(b),	55-1(b), (c), (e), (f), (j), 56-1(a), (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 Identification	Cargo Identification									
A CONTRACTOR OF THE PARTY OF TH	1		1	-			Vapor Re	ecovery		
Name	Chem	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	No.									
Acetonitrile	ATN	37	0	С	311	Α	Yes	3	No	0
Acrylonitrile	ACN	15 ²	0	С	Ш	Α	Yes	4	.50-70(a), .55-1(a)	G
Adiponitrile	ADN	37	0	E	И	Α	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	UI	Α	No	N/A	50-81, 50-86	G
Aminoethylethanolamine	AEE	8	0	E	III	Α	Yes	1	.55-1(b)	G
Ammonium bisulfite solution (70% or less)	ABX	43 2	0	NA	Ш	Α	No	N/A	50-73, 56-1(a), (b), (c)	G
Ammonium hydroxide (28% or less NH3)	AME	l 6	0	NA	101	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G
Anthracene oil (Coal tar fraction)	AHC	33	0	NA	- 11	Α	No	N/A	No	G
Benzene	BNZ	32	0	С	III	Α	Yes	1	50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	вна	32 2	0	С	111	Α	Yes	1	.50-80	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 2	0	С	B	Α	Yes	1	.50-80, .56-1(b), (d), (f), (g)	G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	ВТХ	32	0	B/C	111	Α	Yes	1	50-60	G
Butyl acrylate (all isomers)	BAR	14	0	D	III	'A	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	BMH	1 14	0	D	10	Α	Yes	2	50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	- 111	Α	Yes	1	.55-1(h)	G
Camphor oil (light)	CPC	18	0	D	JI.	Α	No	N/A	No	G
Carbon tetrachloride	СВТ	36	0	NA	101	Α	No	N/A	No	G
Caustic potash solution	CPS	5 2	0	NA	100	Α	No	N/A	50-73, 55-1(j)	G
Caustic soda solution	CSS	5 ²	0	NA	401	Α	No	N/A	. 50-73, 55-1(j)	G
Chemical Oil (refined, containing phenolics)	COI	21	0	E	II	Α	No	N/A	50-73	G
Chlorobenzene	CRE	3 36	0	D	- 10	Α	Yes	1	No	G
Chloroform	CRF	36	0	NA	- m	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	Г 33	0	D	III	Α	Yes	1	.50-73	G
Creosote	CCI	N 21 2	0	Е	111	Α	Yes	1	No	G
Cresols (all isomers)	CRS	3 21	0	Е	- 111	Α	Yes	1	No	G
Cresylate spent caustic	CSC	5	0	NA	- 01	Α	No	N//	A 50-73, 55-1(b)	G
Cresylic acid tar	CR	<	0	E	111	Α	Yes	1	.55-1(f)	G
Crotonaldehyde	CTA		0	С	П	A	Yes	5 4	56-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	СН		0	С	Ш	A	No	N/A	A, No	G
Cyclohexanone	CCI	H 18	0	D	0)	Α	Yes	3 1	.56-1(a), (b)	9
Cyclohexanone, Cyclohexanol mixture	CYX		0	E	III	Α	Yes	s 1	56-1 (b)	G
Cyclohexylamine	CH		0	D	III	Α	Yes	3 1	.56-1(a), (b), (c), (g)	G
Cyclopentadiene, Styrene, Benzene mixture	CS		0	D	101		Yes		50-60, 56-1(b)	G



ited States Coast Guard Dated:

Certificate of Inspection Cargo Authority Attachment

Official #: 1216339

Page 2 of 8

Shipyard: TRINITY

C2-0803458

24-Nov-08

Hull #: 2177-3

Cargo Identification	Cargo Identification									Conditions of Carriage						
		3	l å			Vapor 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						
Dichlorobenzene (all isomers)	DBX	36	0	E	(1)	Α	Yes	3	.56-1(a), (b)	G						
1,1-Dichloroethane	DCH	36	0	С	, III	Α	Yes	1	No	G						
2,2'-Dichloroethyl ether	DEE	41	0	D	11	Α	Yes	1	.55-1(f)	G						
Dichloromethane	DCM	36	0	NA	111	Α	Yes	5	No	G						
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	Е	III	Α	No	N/A	.56-1(a), (b), (c), (g)	G						
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,2	0	Α	111	Α	No	N/A	56-1(a), (b), (c), (g)	G						
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	E	111	Α	No	N/A	.56-1(a), (b), (c), (g)	G						
1,1-Dichloropropane	DPB	36	0	С	H	Α	Yes	3	No	0						
1,2-Dichloropropane	OPP	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	Ð	U	Α	Yes	4	No	G						
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	- 11	A	Yes	1	No	G						
Diethanolamine	DEA	8	0	E	711	A	Yes	1	.56-1(c)	G						
Diethylamine	DEN	7	0	С	III	Α	Yes	3	.55-1(c)	G						
Diethylenetriamine	DET	7 2	0	Е	III	Α	Yes	1	.55-1(c)	G						
Diisobutylamine	DBU	7	0	D	III	A	Yes	3	.55-1(c)	G						
Dilsopropanolamine	DIP	8	0	E	III	A	Yes	1	.55-1(c)	G						
Diisopropylamine	DIA	7	0	Ç	11	A	Yes	3	55-1(c)	- G						
N,N-Dimethylacetamide	DAC	10	0	E	III	A	Yes	3	.56-1(b)	G						
Dimethylethanolamine	DMB	8	0	D	101	A	Yes	1	56-1(b) (c)	G						
Dimethylformamide	DMF	10	0	D	111	A	Yes	1	.55-1(e)	G						
Di-n-propylamine	DNA	7	0	c	li li	A	Yes	3	.55-1(c)	G						
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	ō	ε	0)	A	No	N/A		G						
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	0	A	No	N/A		G						
EE Glycol Ether Mixture	EEG	40	0	D	m	A	No	N/A		- G						
Ethanolamine	MEA		0	E	- 01	A	Yes	1	.56-1(e)	G						
Ethyl acrylate	EAC	14	0	C	(1)	A	Yes		50-70(a), .50-81(a), (b)	G						
Ethylamine solution (72% or less)	EAN	7	0	A	11	A	Yes	6	.55-1(b)	G						
N-Ethylbutylamine	EBA	7	0	Ď	111	A	Yes		55-1(b)	G						
N-Ethylcyclohexylamine	ECC	7	0	D	JII	A	Yes	1	.55-1(b)	G						
Ethylene cyanohydrin	ETC	20	0	E	111	A	Yes		No	G						
Ethylenediamine	EDA	7 2	0	0	111	A	Yes		56-1(c)	G						
Ethylene dichloride	EDC	36 ²		c	111	A	Yes	1	No	- G						
Ethylene glycol hexyl ether	EGH		-0	E	111	A	No	N/A		G						
Ethylene glycol monoalkyl ethers	EGC	_	0	D/E	10	A	Yes	1	No	G						
Ethylene glycol propyl ether	EGP	40	0	E	111	A	Yes	_	No	- G						
2-Ethylhexyl acrylate	EAI	14	0	E	10	A	Yes	2	.50-70(a), .50-81(a), (b)	G						
Ethyl methacrylate	ETM	14	-	D/E	10	A		_	50-70(n)	- G						
2-Ethyl-3-propylacrolein	EPA	19 2	0	-			Yes		No	_						
Formaldehyde solution (37% to 50%)	FMS		-	D/E	111	A	Yes		.55-1(h)	G						
Furfural	FFA	19	0	D	HI		Yes		55-1(h)	_						
Glutaraldehyde solution (50% or less)	GTA		0	NA		A	Yes	_		G						
Hexamethylenediamine solution	HMC		-	E	18	A	No	N/A		G						
Hexamethylene mine	HMI	7	0	c	- 10	A	Yes		55-1(c)	G						
Hydrocarbon 5-9	HFN	-		c		A	Yes		.56-1(b), (c)	G						
Isoprene	IPR	30	0		91	A	Yes	-	.50-70(a), .50-81(a), (b)	G						
Isoprene, Pentadiene mixture	IPN	30		A	111	A	Yes		50-70(a), .50-81(a), (b)	G						
Kraft pulping liquors (free alkali content 3% or more)(including: Black		-	0	B	III	A	No	N/A		G						
Green, or White liquor)		5	°	NA		A	No	N/A	50-73, .56-1(a), (c), (g)	G						
Mesityl oxide	MSC	18 ²	0	D	- 111	Α	Yes	1	No	G						
Methyl acrylate	MAN	1 14	0	C	- III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G						



Serial #: C2-0803458 Dated: 24-Nov-08

Certificate of Inspection

Cargo Identification

Cargo Authority Attachment

Official #: 1216339

Amyl acetate (all isomers)

Page 3 of 8

Shipyard: TRINITY
Hull #: 2177-3

Cargo Identification	1					Conditions of Carriage					
	-	100	1				Vapor R	есочегу			
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 Matts of	Insp. Perlo	
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	No	G	
Methyl diethanolamine	MDE	8	0	E	- Oi	Α	Yes	1	58-1(b), (c)	G	
2-Methyl-5-ethylpyridine	MEP	9	0	Е	- 10	Α	Yes	1	.56-1(e)	Ģ	
Methyl methacrylate	MMM	1 14	0	С	111	Α	Yes	2	50-70(a), .50-81(a), (b)	G	
2-Methylpyridine	MPR	9	0	D	111	Α	Yes	3	56-1(c)	G	
alpha-Methylstyrene	MSR	30	0	D	111	Α	Yes	2	50-70(a), .50-81(a), (b)	0	
Morpholine	MPL	7 2	0	D	III	A	Yes	1	56-1(c)	G	
1- or 2-Nitropropane	NPM	42	0	D	191	Α	Yes	1	.50-81	G	
1,3-Pentadiene	PDE	30	0	Α	UI	Α	Yes	7	.50-70(a), .50-81	G	
Perchloroethylene	PER	36	0	NA	10	Α	No	N/A	No	G	
Polyethylene polyamines	PEB	7 2	0	E	101	Α	Yes	1	.55-1(e)	G	
iso-Propanolamine	MPA	8	0	E	III	A	Yes	1	.56-1(c)	G	
Propanolamine (Iso-, n-)	PAX	8	0	E	101	A	Yes	1	.56-1(b), (e)	G	
iso-Propylamine	IPP	7	0	A	II	A	Yes	5	56-1(c)	G	
Pyridine	PRD	9	0	C	101	A	Yes	1	.55-1(e)	G	
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		0		101	A	No	N/A	.50-73, .55-1(j)	G	
Sodium aluminate solution (45% or less)	SAU	5	0	NA	101	A	No	N/A	.50-73, .56-1(a), (b), (d)	G	
Sodium chlorate solution (50% or less)	SDD	0 12		NA	101	A	No	N/A		0	
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	111	A	No	N/A		G	
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 12		NA	111	A	Yes	1	.50-73, .55-1(b)	G	
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but ess than 200 ppm)	SSI	0 1.		NA	III	Α	No	N/A	50-73. 55-1(b)	G	
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0.4	² O	NA	Ш	Α	No	N/A	.50-73, .55-1(b)	G	
Styrene (crude)	STX		0	D	111	Α	Yes	2	No	G	
Styrene monomer	STY	30	0	D	UI	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	III	Α	No	N/A	No	G	
Tetraethylenepentamine	TTP	7	0	E	111	Α	Yes	1	.55-1(c)	G	
Tetrahydrofuran	THE	41	0	С	101	Α	Yes	1	.50-70(b)	G	
Toluenediamine	TDA	9	0	Е	11	Α	No	N/A	50-73, 56-1(a), (b), (c), (g)	G	
1,2,4-Trichlorobenzene	ТСВ	36	0	Е	100	Α	Yes	1	No	G	
1,1,2-Trichloroethane	TCM		0	NA	111	A	Yes		50-73, 56-1(a)	G	
Trichloroethylene	TCL	36 ²	0	NA	111	A	Yes		No	G	
1,2,3-Trichloropropane	TCN	36	0	E	- 18	A	Yes		50-73, 56-1(a)	G	
Triethanolamine	TEA	8 2		E	- 03	A	Yes		.55-1(b)	G	
Triethylamine	TEN	7	0	C	U	A	Yes		.55-1(e)	G	
Triethylenetetramine	TET	7 2		E	101	A	Yes		.55-1(b)	G	
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	III	A	No	N/A	56-1(a), (b), (c)	G	
Trisodium phosphate solution	TSP	5	0	NA	III	A	No	N/A		G	
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	III	A	No	N/A		G	
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA	111	A	No	N/A		G	
Vinyl acetate	VAM		0	C	Uil	A	Yes		50-70(a), .50-81(a), (b)	G	
Vinyl neodecanate	VAM		0	E	UI	A	No	N/A		G	
VinyItoluene	VNT		0	D	(1)	A	Yes		.50-70(a), .50-81, .56-1(a), (b), (c), (G	
Subchapter D Cargoes Authorized for Vapor Contr		13	U	D	- 111	^	108		() 100 () 100 ()		
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	and the same of th		
	AEB	20	D	E		A	Yes	1	TO SHARE THE SHA	100	
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AED	20	U			A	163	1			

Yes

AEC



Serial #: C2-0803458

24-Nov-08

Certificate of Inspection

Cargo Authority Attachment

Official #: 1216339

Page 4 of 8

Shipyard: TRINITY

Hull #: 2177-3

Cargo Identification	Cargo Identification									
	Т	1		1				Recovery	tions of Carriage	\top
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	vcs	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	1		
Benzyl alcohol	BAL	21	D	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		D	D		A	Yes	1	-	
Butyl alcohol (sec-)	BAS		D	С		Α	Yes	1	-	
Butyl alcohol (tert-)	BAT	. 8	D	С	7	Α	Yes	1		
Bulyl benzyl phthalate	ВРН	34	D	E		Α	Yes	1		
Bulyl toluene	8UE	32	D	D		Α	Yes	1		
Caprolactam solutions	CLS	22	D	ε		A	Yes	1		
Cyclohexane	CHX	31	D	c		A	Yes	1		
Cyclohexanol	CHN	20	D	Ε		A	Yes	- i		
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		A	Yes	2		
p-Cymene	CMP	32	D	D		A	Yes	1		
iso-Decaldehyde	IDA	19	D	E		Â	Yes	1		
n-Decaldehyde	DAL	19	D	Ē	-	Â	Yes	1		
Decene	DCE	30	D	D	- 100	A	Yes	1		
Decyl alcohol (all isomers)	DAX	20 2	0	E	_	A				
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Â	Yes	1		
Diacetone alcohol	DAA	20 2	D	D			Yes	1 1		
ortho-Dibutyl phthalate	DPA	34	D	E		A	Yes	1		
Diethylbenzene	DEB	32	D			A	Yes	1		
Diethylene glycol	DEG	40 ²		0	2	A	Yes	1		
Diisobutylene	DBL		D	E	-	A	Yes	1		
Diisobulyl ketone	-	30	D	С		A	Yes	1		
	DIK	18	D	D	-	A	Yes	1		
Diisopropylbenzene (all isomers)	DIX	32	D	E		A	Yes	1		
Directlyl ohthalate	DTL	34	D	E		A	Yes	1		
Dioctyl phthalate	DOP	34	D	E		Α_	Yes	1		
Dipentene	DPN	30	D	D		Α	Yes	1		
Diphenyl	DIL	32	D	D/E		_ A	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		VI
Distillates: Flashed feed stocks	DFF	33	D	E		Α	Yes	1		
Distillates: Straight run	DSR	33	D	E		Α	Yes	1		=3-3
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	10-10 III III III III III III III III III I	
Ethoxy triglycol (crude)	ETG	40	D	Е		Α	Yes	1		
Ethyl acetate	ETA	34	D	С		Α	Yes	1		
Ethyl acetoacetate	EAA	34	D	Ε		Α	Yes	1	170	-
Ethyl alcohol	EAL	20 ²	D	С		Α	Yes	1		
Ethylbenzene	ETB	32	D	С		Α	Yes	1		
Ethyl butanol	EBT	20	D	D	- (U	Α	Yes	1		
Ethyl tert-bulyl ether	EBE	41	D	С		Α	Yes	1		
Ethyl bulyrate	EBR	34	D	D		Α	Yes	1		
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1		
Ethylene glycol	EGL	20 2	D	E	775	Α	Yes	1		
And the second of the second o										

^{***} This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. ***



Serial #: C2-0803458 Dated: 24-Nov-08

Certificate of Inspection

Cargo Authority Attachment

Official #: 1216339

Page 5 of 8

Shipyard: TRINITY Hull #: 2177-3

Cargo Identificatio		Conditions of Carriage								
	Chem	Compat	Sub		Hull	Tank	App'd	Recovery VCS	Special Requirements in 46 CFR	Insp.
Name .	Code	Group No	Chapter	Grade	Туре	Group	(Y or N)	Category	151 General and Mat'ls of	Perio
Ethylene glycol butyl ether acetate	EMA	34	D	E	3530.55	Α	Yes	1		
Ethylene glycol diacetate	EGY	34	Đ	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	E		Α	Yes	1		
Ethyl propionate	EPR	34	D	С		Α	Yes	1	To the second second	
Ethyl toluene	ETE	32	D	D		Α	Yes	1		
Formamide	FAM	10	D	E	440	Α	Yes	1		
Furfuryl alcohol	FAL	20 2	D	Е	WITE I	Α	Yes	1	III WA THERM	
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1		
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1		15-
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		Α	Yes	1	Ngx II TiDES	
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	7107	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	E		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	25.15-	Α	Yes	1	5 7 A	
Heptene (all isomers)	HPX	30	D	С		Α	Yes	2		341
Heptyl acetate	HPE	34	D	Ε		Α	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 2	D	B/C		Α	Yes	1	CARL STATE	
Hexanolc acid	HXO	4	D	E		Α	Yes	1		11-1
Hexanol	HXN	20	D	D		Α	Yes	1	TERRITORIA CONTRACTORIA	-
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2		100
Hexylene glycol	HXG	20	D	Е		Α	Yes	1	The second second	
Isophorone	IPH	18 2	D	Ε	_	Α	Yes	1		
Jet fuel: JP-4	JPF	33	D	E	7	A	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		A	Yes	1		J875
Kerosene	KRS	33	D	D		Α	Yes	1		
Methyl acetate	MTT	34	D	D		A	Yes	1	THE RESERVE TO SERVE THE PARTY OF THE PARTY	
Methyl alcohol	MAL	20 ²	D	С	350	A	Yes	1		
Methylamyl acetate	MAC		D	D		A	Yes	1		_
Methylamyl alcohol	MAA		D	D	150	A	Yes	1		
Methyl amyl ketone	MAK		D	D		A	Yes	1		
Methyl tert-butyl ether	MBE		D	С		A	Yes	1		-
Methyl butyl ketone	MBK		D	С		A	Yes	1		
Methyl butyrate	MBU		D	c	-	A	Yes			_
Methyl ethyl ketone	MEK		D	c		A	Yes	1		
Methyl heptyl ketone	MHK		D	D		A	Yes	1		
	MIK	18 2	D	С	_				7002-11	_
Methyl isobutyl ketone	MNA		D	E		A	Yes Yes			
Methyl naphthalene (molten)			D	D		A	_			-
Mineral spirits	MNS				-	A	Yes			
Myroene	MRE	-	D	D #		Α .	Yes			
Naphtha: Heavy	NAG		D	#		A	Yes			
Naphtha: Petroleum	PTN		D	#		A	Yes			1 1111
Naphtha: Solvent	NSV	33	D	D		Α	Yes	1		



C2-0803458 Dated:

24-Nov-08

Certificate of Inspection

Cargo Authority Attachment

Official #: 1216339

Page 6 of 8

Shipyard: TRINITY

Hull #: 2177-3

Cargo Identification	n							Condi	tions of Carriage	
	T							Recovery		
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Naphtha: Vamish makers and painters (75%)	NVM	33	D	С		Α	Yes	1		
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		Α	Yes	1		
Nonene (all isomers)	NON	30	D	D		Α	Yes	2		
Nonyl alcohol (all isomers)	NNS	20 ²	D	E		Α	Yes	1		
Nonyl phenol	NNP	21	D	٤		Α	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	Ε		Α	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		Α	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	Е		A	Yes	1		
Octanol (all isomers)	OCX	20 ²	D	Е		A	Yes	1		
Octene (all isomers)	отх	30	D	С		A	Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E		A	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		A	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		A	Yes	1		
Oil, fuel: No. 6	OSX	33	D	E		A	Yes	1		
Oil, misc: Crude	OIL	33	D	C/D		A	Yes	1		
Oil, misc: Diesel	ODS	33	D	D/E			Yes	- '		
Oil, misc: Gas, high pour	OGP	33	D	E		A	Yes	1		_
Oil, misc. Lubricating	OLB	33	D	Ē		A	Yes	1		
Oil, misc: Residual	ORL	33	D	E		A	Yes			
Oil, misc: Turbine	ОТВ	33	D	E		A	Yes	1 ::		
Pentane (all isomers)	PTY	31		A		A	Yes	1		
Pentene (all isomers)	PTX	30		Ā				5		
alpha-Pinene	PIQ	30	_ D	0			Yes			
beta-Pinene	PIP	30		0		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D.	E		_ A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34		-	-	_ A	Yes	1		
Polybutene	PLB	30	D	E		_ A	Yes	1		
	PGC	40	_ <u>D</u>	E		A	Yes			
Polypropylene glycol			D	E		A	Yes	1		
iso-Propyl acetate	IAC	34	_ <u>D</u>	C		A	Yes	11		
n-Propyl acetate	PAT	34	D	С		A	Yes	1		
iso-Propyl alcohol	IPA	20 °	D	С		A	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		A	Yes	1		
Propylene glycol	PPG	20 ²	D	_E		<u> </u>	Yes	1		
Propylene glycol methyl ether acetate	PGN	34		D		_ A	Yes	1		
Propylene tetramer	PTT	30	D	D		Α	Yes	1		
Sulfolane	SFL	39	D	Е	_	Α	Yes	1		
Tetraethylene glycol	TTG	40	D	E		Α	Yes	1		
Tetrahydronaphthalene	THN	32	D	E		Α	Yes	1		
Toluene	TOL	32	D	C		_ A	Yes	1		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		A	Yes	1		
Triethylbenzene	TEB	32	D	E		Α	Yes	1		
Triethylene glycol	TEG	40	D	E		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	E		Α	Yes	1		
Undecene	UDC	30	D	D/E		Α	Yes	1		
1-Undecyl alcohol	UND	20	D	Ε		Α	Yes	1		
									-	



Serial #: C2-0803458

24-Nov-08

Certificate of Inspection

Cargo Authority Attachment

Official #: 1216339

Page 7 of 8

Shipyard: TRINITY Hull #: 2177-3

Cargo Identific	Conditions of Carriage									
Name				Grade	Hull Type	Tank Group	App'd		Special Requirements in 46 CFR 151 General and Mat's of	Insp. Period
Xylenes (ortho-, meta-, para-)	XLX	32	D	D	100	Α	Yes	1		



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

Serial #: C2-0803458

Dated: 24-Nov-08

Certificate of Inspection

Cargo Authority Attachment

Shiovard: TRINITY

Hull #: 2177-3

Official #: 1216339

Page 8 of 8

Explanation of terms & symbols used in the Table:

Cargo Identification

Name Chem Code 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

Note 1 Note 2 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.

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 Subchaoter D Subchapter O Note 3

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

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 sufficient 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 (Y 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:

The specified cargo's provisional classification for vapor control systems

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 fouring safety components 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. This requirement is in addition to the requirements of Category 1.

Category 4

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 nd vapor growth rates as compared to Calegory 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 Category 7

(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

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