

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

Certification Date: 31 May 2023 Expiration Date: 31 May 2024

# Temporary 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

This Temporary Conflicate of Inspection is issued under the provision of Title 45 United States Code. Section 399, in lieu of the regular certificate of inspection, and shall be in force only until the

	receipt on board sa	aid vessel of the	e original centificate of insp	pection, this certific	ate in no case to be v	alid after one year from	the date of inspection	e in take only that the
Vessel Name			Official Number	IMO	Number	Call Sign	Service	
KIRBY 1006	33		1258673				Tank Bar	ge
Hailing Port								
WILMINGTO	ON, DE		Hull Material	ŀ	lorsepower	Propulsion		
			Steel					
UNITED ST	ATES							
Place Built			Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DIMT	
ASHLAND	CITY, TN		Delivery Date		R-705	R-705	TWO	Length R-200 0
				14Apr201:	D  -	I-		1-0
UNITED ST	ATES							
Owner	NID MADINE LD				erator			
	ND MARINE LP DRIVE SUITE 1	000			RBY INLAND 1350 MARKET			
HOUSTON,		000			HANNELVIEV			
UNITED STA	ATES				VITED STATE			
This vessel r 0 Certified Li	nust be manned feboatmen, 0 Ce	with the fortified Ta	ollowing licensed nkermen, 0 HSC	and unlicen Type Ratin	sed Personne g, and 0 GMD	l. Included in w SS Operators.	hich there mus	t be
0 Masters	0	Licensed N	lates 0 Chief	Engineers	0 0	Dilers		
0 Chief Mate	es 0	First Class	Pilots 0 First	Assistant Engi	neers			
0 Second M	ates 0	Radio Offic	ers 0 Secon	nd Assistant E	ngineers			
0 Third Mate	es 0	Able Seam	en 0 Third	Assistant Eng	neers			
0 Master Fire	st Class Pilot 0	Ordinary S	eamen 0 Licen	sed Engineers				
0 Mate First		Deckhands		fied Member E.				
In addition, the Persons allow	nis vessel may ca wed: 0	arry 0 Pas	sengers, 0 Other	r Persons in	crew, 0 Perso	ons in addition to	o crew, and no	Others. Total
Route Pern	nitted And Cond	ditions Of	Operation:					
Lakes,	Bays, and S	ounds-						
Also, in fa Florida.	ir weather only	, not mo	ere than twelve	(12) miles	from shore	between St. N	Marks and Carr	abelle,
This vessel	has been grant	ed a fre	sh water servi	ce evaminat	ion Interval	in accordance	sa with 45 CPD	muble 21 10
21(b); if t	his vessel is c	perated	in salt water	more than s	six (6) month	is in any twel	lve (12) month	nerind the
change in s	be inspected u	ising sal	t water interv	als and the	cognicant (	OCMI notified	in writing as	soon as this
This tank b	arge is partici	pating i	n the Eighth-N	inth Coast	Guard Distri	ict's Tank Bar	rge Streamline	d Inspection
***SEE NE	XT PAGE FOR	ADDITIC	NAL CERTIFIC	CATE INFO	RMATION***			
							EC the Officer	in Charge, Marine
Inspection, S	ector New Orlean	ns certifie	d the vessel, in a	ll respects, i	s in conformit	with the applic	cable vessel ins	in Charge, Marine pection laws and
the rules and	regulations preso	cribed the	reunder.			15-1-	1 1 .	p
	Annual/Perio	dic/Re-In	spection		This certificat	e issued by: /	1 1/1 1/	
Date	Zone	A/P/R	Signatu	re	J. H	HART COM	ANDER, by di	rection
					Officer in Charge, Ma	1	XY	
						Sector N	lew Orleans	

Inspection Zone



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

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## Temporary Certificate of Inspection

Vessel Name: KIRBY 10063

Program (TBSIP). Inspection activities aboard this barge shall be conducted in accordance with its Tank Barge Action Plan. Inspection issues concerning this barge should be directed to Sector New Orleans OCMI.

#### ---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

30Apr2033

28Apr2023

06May2015

Internal Structure

30Apr2028

28Apr2023

08Apr2020

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

Authorization:

FLAMMABLE/COMBUSTIBLE LIQUIDS IN 46 CFR TABLE 30.25-1 AND SPECIFIED HAZARDOUS

**CARGOES** 

**Total Capacity** 

Units

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

10295

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	598	13.58
2	551	13.58
3	547	13.58

#### \*Loading Constraints - Stability\*

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
11	1453	9ft Oin	13.58	R,LBS,0-12
<b>10</b>	1615	9ft 9in	13.58	R,LBS,0-12

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial C1-1500951, dated March 11, 2015 and Grade "A" and lower cargoes may be carried, and then only in the tanks indicated.

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 figures, tables and appendices of 46 CFR 150 in conjunction with the compatibility group numbers from the "COMPAT GRP" column listed in the vessel's CAA.

The maximum density of cargo which may be filled to the tank top is 9.99 lbs/gal. Cargoes with higher densities, up to 13.58 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 listed below reflect uniform (within 5%) loading at the deepest draft allowed. when carrying subchaper "O" cargoes at shallower drafts, the barge(s) should always be loaded uniformly, within 5%.

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.

#### \*Vapor Control Authorization\*

In accordance with 46 CFR 39, excluding 46 CFR 39,4000, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter Serial C1-1500951 dated March 11, 2015 and the list of authorized cargoes on the



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CAA, Serial C1-1500951 dated March 11, 2015 and found acceptable for 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 3 psig p/v valve with coast guard approval 162.017/167/4. the cargo tank top is suitable for a maximum allowable working pressure (mawp) of 3.5 psi.

In accordance with 46 CFR Part 39.1017 and 39.5001(e) this vessel's VCS has been evaluated and approved for multibreasted tandem loading with other vessels specifically approved to tandem load with this vessel.

### --- Inspection Status ---

\*Fuel Tanks\*

Internal Examinations

Tank ID **Previous** Last Next **MACHINERY DECK** 06May2015

\*Cargo Tanks\*

	Internal Exam			External Exan	n	
Tank Id	Previous	Last	Next	Previous	Last	Next
1	06May2015	28Apr2023	30Apr2033		₩)	-
2	06May2015	28Apr2023	30Apr2033	-	•	-
3	06May2015	28Apr2023	30Apr2033		##:	-
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1	-		•	06May2015	<b></b> 3	
2			•	06May2015	*:	
3	-		s <b>⇔</b>	06May2015	<b>=</b> 0	

## --- Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

### --- Fire Fighting Equipment ---

Number of Fireman Outfits - 0

\*Fire Extinguishers - Hand portable and semi-portable\*

Quantity Class Type 2

40-B:C

\*\*\*END\*\*\*



Dated:

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10063

Shipyard: TRINITY MARINE. ASHLAND CITY, TN

Hull#: 5116

Official #: 1258673 46 CFR 151 Tank Group Characteristic

Tank Group Information	Cargo	dentification		argo Identification		rgo Identification			Carpo	Tanks		Cargo Transfer		Environmental Control		Fire	Special Requirements			Τ
Trik Grip Tanks in Group	Density	Press.	Temp.	Huii Typ	Seg Tank	Тура	Vent	Gauge	Pipe Class	Cont	Tanks	Handing Space	Protection Provided	General	Materials of Construction		Temp			
A #1, #2, #3	13.6	Atmos	Amb.	11	1ii 2ii	integral Gravity	PV	Closed	D	G-1	NR	NA	Portable	.50-60, .50-70(8), .50-70(b), .50-73, .50-81(a), .60-	55-1(b), (c), (e), (f), (h), (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 Identificatio	n				ļ	Conditions of Carriage						
							Vapor R					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Huli Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Matts of	Insp. Period		
Authorized Subchapter O Cargoes										a		
Acetonitrile	ATN	37	0	С	, III	<u> </u>	Yes	3	,50-70(a), .55-1(e)	3		
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	li li	<u> </u>	Yes	4		- 6		
Adiponitrile	ADN		_	E	Ħ	Α	Yes		No	<u> </u>		
Aikyi(C7-C9) nitrates	AKN	34 2	0	NA		A	No	N/A		- G		
Aminoethylethanolamine	AEE	. 8	0	_ E	_ (1)	A	Yes		,55-1(b)	· 6		
Ammonium bisulfite solution (70% or less)	ABX	43 2	0	NA	111	Α	No	N/A		- G		
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	(III	A	No	N/A				
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	ti	A	No	N/A				
Benzene	BNZ	32	0	С	111	Α	Yes		.50-60			
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 ²	0	C	111	Α	Yes		.50-60	- 6		
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 2	0	С	III	Α	Yes		.50-60, .56-1(b), (d), (f), (g)			
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	(II	A	Yes		.50-60	G		
Butyl acrylate (all isomers)	BAR	. 14	0	D	[11	A	Yes		.50-70(a), .50-81(a), (b)	<u> </u>		
Butyl methacrylate	BMI	1 14	0	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Butyraldehyde (all isomers)	BAE	19	0	С	u	A	Yes	1	.55-1(h)	G		
Camphor oil (light)	CPC	18	0	D	H	Α	No	N/A		G		
Carbon tetrachloride	CBT	36	0	NA	E11	Α	No	N/A		<u> </u>		
Caustic potash solution	CPS	5 2	0	NA	III	Α	No	N/A	<u> </u>	G		
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	HI	Α	No	N/A		G		
Chemical Oil (refined, containing phenolics)	COL	21	0	E	- 11	Α	No	N/A	.50-73	G		
Chlorobenzene	CRE	36	0	D	111	Α	Yes	1	No	G		
Chloreform	CRF	36	0	NA	III	Α	Yes	3	No	G		
Coal tar naphtha solvent	NCT	33	0	D	ta	Α	Yes	1	.50-73	G		
Creosole	CCV	V 21 2	0	E	tii	Α	Yes	1	No	G		
Cresols (all Isomers)	CRS	3 21	0	E	TII.	Α	Yes	1	No	G		
Cresylate spent caustic	CSC	5	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G		
Cresylic acid tar	CR)	( 21	0	Ε	li)	A	Yes	1	.55-1(1)	G		
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	(I	Α	Ye	3 4	.55-1(h)	G		
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHO	3	0	С	111	A	Ye	s 1	No	G		
	CCI	1 18	0	D	ŢĮ]	Α	Ye	s 1	.56-1(a), (b)	G		
Cyclohexanone, Cyclohexanol mixture	CYX		0	E	III	A	Ye	s 1	.58-1 (b)	G		

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Vessel Name: KIRBY 10063

Shipyard: TRINITY MARINE,

ASHLAND CITY, TN

Official#: 1258673

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Cargo Identification	on .					Conditions of Carriage							
Name		Compat Group No		Grade	Huil Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ts of .56-1(a), (b), (c), (g)	Insp. Period			
Cyclohexylamine	CHA	7		<u>D</u>	10	A_	Yes	1	.50-8056-1(b)				
Cyclopentadiene, Styrene, Benzene mixture	CSB	30 14	0	<u>D</u>	ul Ul	A	Yes Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	<del>-</del>			
iso-Decyl acrylate		36	-		10		Yes	3	.56-1(a), (b)	<del>-</del>			
Dichlorobenzene (all isomers)	DBX		-	E C		A		1	No	G			
1,1-Dichloroethane	DCH	36 41	-	<u> </u>	<u> 10</u>	A	Yes Yes	1	.55-1(f)				
2,2'-Dichloroethyl ether	DEE		<del>-</del>			A		5	No No	G			
Dichloromethane	DCM	36 43	-	NA E	<u> </u>	A	Yes No	N/A	.56-1(a), (b), (c), (g)	- 6			
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	0 1,2			III	<u>^</u>	No	N/A	.56-1(a), (b), (c), (g)				
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD			A .						<u> </u>			
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0_	E		A	No	N/A	.56-1(a), (b), (c), (g)				
1,1-Dichloropropane	DPB	36	<u> </u>	_ <u>c</u> _	111	<u>A</u> _	Yes	3	No	- 6			
1,2-Dichloropropane	DPP	36	0	_ <u>c</u>	111	<u>A</u> _	Yes	3	No	- 6			
1,3-Dichloropropane	DPC	36		<u>C</u>		Α_	Yes	3		 G			
1,3-Dichloropropene	DPU	15	0	D	11	<u>A</u>	Yes	4	No	<u> </u>			
Dichloropropene, Dichloropropane mixtures	DMX	15	0	<u> </u>	13	A	Yes		No				
Diethanolamine	DEA	8	0	E	111	A	Yes	1	.55-1(c)	<u> </u>			
Diethylamine	DEN	7		С	133	A	Yes	3	.55-1(c)	G			
Diethylenetriamine	DET	72	0	E	111	A	Yes	1	.55-1(a)	<u> </u>			
Diisobutylamine	DBU	7		D	11)	A	Yes	3	.55-1(c)	G			
Diisopropanolamine	DIP	8	0	E	III	Α	Yes	1_	.55-1(o)	g			
Diisopropylamine	DIA	7	<u> </u>	<u> </u>	- 11	Α	Yes	3	.55-1(o)	G			
N,N-Dimethylacetamide	DAC	10	0	Е	a	A	Yes	3	.56-1(b)	G			
Dimethylethanolamine	DMB	8	0	D	(I)	A	Yes	1	.56-1(b), (c)	G			
Dimethylformamide	DMF	10	0	D	(I)	Α	Yes	1	.55-1(e)				
Di-n-propylamine	DNA	7	0	С	[]	Α	Yes	3	.55-1(c)	G			
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	(II	A	No	N/A	,56-1(b)	G			
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	a	Α	No	N/A	No	G			
EE Glycol Ether Mixture	EEG	40	0	D	(1)	Α	No	N/A	No	G			
Ethanolamine	MEA	8	0	E	CC1	Α	Yes	1	.55-1(c)	G			
Ethyl acrylate	EAC	14	0	C	tti	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Ethylamine solution (72% or less)	EAN	7	0	Α	11	Α	Yes	6	.55-1(b)	G			
N-Ethylbutylamine	EBA	7	0	D	Ш	Α	Yes	3	.55-1(b)	G			
N-Ethylcyclohexylamine	ECC	7	0	D	EU .	Α	Yes	1	.55-1(b)	G			
Ethylene cyanohydrin	ETC	20	0	E	111	Α	Yes	1	No	G			
Ethylenediamine	EDA	72	0	D	111	Α	Yes	1	.55-1(c)	G			
Ethylene dichloride	EDC	36 <sup>2</sup>	0	Ç	(II	Α	Yes	1	No	G			
Ethylene glycol hexyl ether	EGH	40	0	E	CSI	Α	No	N/A	No	G			
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	(I)	Α	Yes	1	No	G			
Ethylene glycol propyl ether	EGP	40	0	E	(1)	Α	Yes	1	No	G			
2-Ethylhexyl acrylate	EAI	14	0	E	m	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Ethyl methacrylate	ETM	14	0	D/E	(1)	A	Yes	2	,50-70(s)	G			
2-Ethyl-3-propylacrolein	EPA	19 2	0	E	C13	Α	Yes	1	No	G			
Formaldehyde solution (37% to 50%)	FMS	19 <sup>2</sup>	0	D/E	[]]	Α	Yes	1	.55-1(h)	G			
Furfural	FFA	19	0	D	(11	Α	Yes	1	.55-1(h)	G			
Giutaraldehyde solution (50% or less)	GTA	19	0	NA	(I)	Α	No	N/A	No	G			
Hexamethylenediamine solution	HMC	7	0	E	EI1	Α	Yes	1	.55-1(c)	G			
Hexamethyleneimine	HM!	7	0	С	ti	Ā	Yes	1	.56-1(b), (c)	G			
			0	С		A			.50-70(a), .50-81(a), (b)				

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Shipyard: TRINITY MARINE, ASHLAND CITY, TN

Hull #: 5116

Cargo Identification						Conditions of Carriage							
								ecovery					
Name Isoprene	Chem Code IPR	Compat Group No 30	Sub Chapter O	Grade A	Huli Type (	Tank Group A	App'd (Y or N) Yes	VCS Category	Special Requirements in 46 CFR 151 General and Mattis of .50-70(a), .50-81(a), (b)	Insp. Period G			
Isoprene, Pentadiene mixture	IPN		<del>-</del>	В		<del>-</del> A	No	N/A	.50-70(a), .55-1(c)	G			
Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	(II	A	No	N/A	.50-73, .56-1(a), (c), (g)	G			
Mesityl oxide	MSO	18 2	0	D	CII	Α	Yes	1	No	G			
Methyl acrylate	MAM	14	0	С	ttt	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Methylcyclopentadiene dimer	MCK	30	0	C	III	À	Yes	1	No	G			
Methyl diethanolamine	MDE	8	0	E	(II	A	Yes	1	.56-1(b), (c)	G			
2-Methyl-5-ethylpyridine	MEP	9	0	E	CE1	A	Yes	1	.55-1(e)	G			
Methyl methacrylate	MMN	14	0	c	[1]	A	Yes	2	.50-70(a), .50-81(a), (b)	G			
2-Methylpyridine	MPR	9	0	D	111	A	Yes	3	.55-1(c)	G			
alpha-Methylstyrene	MSR	30	<u> </u>	<u> </u>	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G			
Morpholine	MPL	72	<del>-</del>		<u> </u>	A	Yes	1	.55-1(c)	G			
Nitroethane	NTE	42	0	D	<u> </u>	A	No	N/A	.50-81, .56-1(b)	G			
1- or 2-Nitropropane	NPM	42	-	D	91	$\frac{\lambda}{A}$	Yes	1	.50-81	G			
1,3-Pentadlene	PDE	30			(1)	$\frac{\hat{A}}{A}$	Yes	<del></del>	.50-70(e), .50-81	G			
Perchloroethylene	PER	36	-	NA NA	[]]	Ā	No	N/A	No	G			
	PEB	7 2		E	101	_ <u>^</u>	Yes	1	.55-1(e)	G			
Polyethylene polyamines	MPA	8	<del>-</del>	<u>_</u>	(1)	<del>-</del> -	Yes	<del>-</del>	.55-1(c)				
iso-Propanolamine									.56-1(b), (c)	G			
Propanolamine (iso-, n-)	PAX	<u>8</u> 7	<u> </u>	E	- (5)	A	Yes	1	.55-1(c)	G			
iso-Propylamine	IPP	<del></del>	0	C		A	Yes	5	.55-1(e)	<del>-</del> -			
Pyridine	PRD	9 5			(11	<u>A</u>	Yes	1	.50-73, .55-1(f)				
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide			<u> </u>	***	(1)	A	No	N/A	.50-73, .56-1(a), (b), (c)	G			
Sodium aluminate solution (45% or less)	SAU	5		NA NA		A	No	N/A	.50-73				
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA.		<u>A</u> _	No_	N/A	· · · · · · · · · · · · · · · · · · ·	 G			
Sodium hypochlorite solution (20% or less)	SHQ	5		NA	- 111	<u>A</u>	No	N/A	.50-73, .56-1(a), (b)				
Sodium suifide, hydrosuifide solution (H2S 15 ppm or less)	SSH	0 1,2		NA NA	<u> 101 </u>	<u>A</u> _	Yes	1	.50-73, .55-1(b)	G			
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	SSI	0 1.2	0	NA	III	Α	No	N/A	.50-73, .55-1(b)	G 			
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2	0	NA	11	Α	No	N/A	.50-73, .55-1(b)	G			
Styrene (crude)	STX	30	0	D	111	Α	Yes	2	No	G			
Styrene monomer	STY	30	0	D	(II	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	tti	Α	No	N/A	No	G			
Tetraethylenepentamine	TTP	7	0	E	(II	Α	Yes		.55-1(c)	G			
Tetrahydrofuran	THF	41	٥	С	(II	Α	Yes	1	.50-70(b)	G			
Toluenediamine	TDA	9	0	E	ti	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G			
1,2,4-Trichlorobenzene	TCB	36	0	E	(1)	Α	Yes	1	No	G			
1,1,2-Trichloroethane	TCM	36	0	NA	111	Α	Yes	1	.50-73, .56-1(a)	G			
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA	HI	Α	Yes	1	No	G			
1,2,3-Trichicropropane	TCN	36	0	E	II	Α	Yes	3	.50-73, .56-1(z)	G			
1,2,0-11/01/01/01/01/0					***	A	Yes	1	.58-1(b)	G			
Triethanolamine	TEA	8 <sup>2</sup>	0	Ε	Ш	Α	163	•					
weight the second secon		8 <sup>2</sup>	0	C	0	A A	Yes	3	.55-1(e)	G			
Triethanolamine Triethylamine	TEA								.55-1(e) .55-1(b)	G			
Triethylamine Triethylamine Triethylenetetramine	TEA TEN	7	0	С	0	Α	Yes	3					
Triethylamine Triethylenetetramine Triphenylborane (10% or less), caustic soda solution	TEA TEN TET	7 7 <sup>2</sup>	0	C E	() ()	A	Yes Yes	3 1	.55-1(b)	G			
Triethanolamine Triethylamine Triethylenetetramine Triphenylborane (10% or less), caustic soda solution Trisodium phosphate solution	TEA TEN TET TPB	7 7 <sup>2</sup> 5	0 0	C E NA	() 	A A	Yes Yes No	3 1 N/A	.56-1(b) .56-1(a), (b), (c)	G			
Triethanotamine Triethytamine Triethytenetetramine Triphenylborane (10% or less), caustic soda solution Trisodium phosphate solution Urea, Ammonium nitrate solution (containing more than 2% NH3)	TEA TEN TET TPB TSP	7 7 <sup>2</sup> 5	0 0 0	C E NA NA	01 111 111 111	A A A	Yes Yes No	3 1 N/A N/A	.55-1(b) .56-1(a), (b), (c) .50-73, .58-1(a), (c).	G G			
Triethanolamine Triethylamine Triethylenetetramine Triphenylborane (10% or less), caustic soda solution Trisodium phosphate solution	TEA TEN TET TPB TSP UAS	7 7 <sup>2</sup> 5 5 6	0 0 0 0	C E NA NA	01 111 111 111 111	A A A A	Yes Yes No No	3 1 N/A N/A N/A	.55-1(b) .56-1(a), (b), (c) .50-73, .56-1(a), (c), .56-1(b)	G G G			

<sup>\*\*\*</sup> This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. \*\*\*



# Certificate of Inspection

## Cargo Authority Attachment

Shipyard: TRINITY MARINE,

ASHLAND CITY, TN

Serial #: C1-1500951

Hull#: 5116

Vessel Name: KIRBY 10063

Official #: 1258673

Page 4 of 8

Cargo Identificatio	n							Condi	tions of Carriage	
Name Vinyttoluene	Chem Code VNT	Compat Group No 13	Sub Chapter O	Grade D	Hull Type III	Tank Group A	Vapor F App'd (Y or N) Yes	Recovery VCS Category 2	Special Requirements in 46 CFR 151 General and Marts of .50-70(a), .50-81, .56-1(a), (b), (c), (	Insp. Period G
Subchapter D Cargoes Authorized for Vapor Cont	rol									
Acetone	ACT	18 <sup>2</sup>	D	С		Α	Yes	1		
Acetophenone	ACP	18	D	E		Α	Yes	1		
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	Ε		Α	Yes	1		
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		Α	Yes	1		
Amyl acetate (all isomers)	AEC	34	D	D		Α	Yes	1		
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	11		
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		A	Yes	1		
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1		
Butyl alcohol (iso-)	IAL	20 <sup>2</sup>	D	D		Α	Yes	1	Access of the Mark Access to the Control of the Con	
Butyl alcohol (n-)	BAN	20 <sup>2</sup>	D	D		Α	Yes	1		
Butyl alcohol (sec-)	BAS	20 ²	D	С		Α	Yes	11		
Butyl alcohol (tert-)	BAT	20 <sup>2</sup>	D	С		Α	Yes	1		
Butyl benzyl phthalate	BPH	34	D	E		Α	Yes	1		
Butyl toluene	BUE	32	D	D		Α	Yes	1		
Caprolactem solutions	CLS	22	D	E		A	Yes	11		
Cyclohexane	CHX	31	D	С		Α	Yes	1		
Cyclohexanol	CHN	20	D	E		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	E		Α	Yes			
n-Decaldehyde	DAL	19	D	E		Α	Yes	1		
Decene	DCE	30	D	<u> D</u>		<u> </u>	Yes	1		
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	E		<u>A</u>	Yes			
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		<u> </u>	Yes	1		
Diacetone alcohol	DAA	20 2	<u>D</u>	D		<u> </u>	Yes	1		
ortho-Dibutyl phthalate	DPA	34	<u>D</u>	E		<u> </u>	Yes			
Diethylbenzene	DEB	32	_ <u>D</u>	<u>D</u>		<u>A</u>	Yes	1		
Diethylene glycol	DEG	40 <sup>2</sup>	D	E		A .	Yes	1		
Dilsobutylene	DBL	30	D	<u>C</u>	~	A .	Yes			
Dlisobutyl ketone	DIK	18	D	<u>D</u>		A	Yes	1		
Dilsopropylbenzene (all isomers)	DIX	32	D	E		<u>A</u>		1		
Dimethyl phthalate	DTL	34	D	E		A	Yes	1		
Dioctyl phthalate	DOP	34	D	_ <u>=</u>		A A	Yes	1		
Dipentene	DPN	30	<u> </u>	D/E		A .	Yes	1		
Diphenyl	DIL		<u>D</u>	E		- <u>^</u>	Yes	1		
Diphenyl, Diphenyl ether mixtures	DDO	33 41	D D	(E)			Yes	1		
Diphenyl ether	DPG	40	D D	E		A	Yes	1	<u></u>	
Dipropylene glycol	DFF	33	D	_ <u></u> E		A	Yes	1		
Distillates: Flashed feed stocks	DSR	33	D	E		A	Yes	1		
Distillates: Straight run	DOZ	30	D	D		A	Yes	1	# \$1.00   \$1.00 mm   1.00	
Dodecene (all Isomers)	DDB	32	D	E		Ā	Yes	1		
Dodecylbenzene, see Alkyl(C9+)benzenes	EEA	34	<u>D</u>	<u> </u>		A	Yes	1		
2-Ethoxyethyl acetate		VT	_	_				• •		

<sup>\*\*\*</sup> This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. \*\*\*





Serial #: C1-1500951 Dated: 11-Mar-15

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10063
Official #: 1258673

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Shipyard: TRINITY MARINE, ASHLAND CITY, TN

Hull #: 5116

Cargo Identification	on					Conditions of Carriage							
Name	Chem Code ETG	Compat Group No 40	Sub Chapter D	Grade E	Hui Type	Tank Group A	App'd (Y or N) Yes	Recovery VCS Category 1	Special Requirements in 46 CFR 151 General and Mat'ls of	insp. Perio			
Ethyl scetate	ETA	34	Ď	c		A	Yes	1					
Ethyl acetoacetate	EAA	34	<u> </u>	E		Ä	Yes	<del>-</del>					
Ethyl alcohol	EAL	20 2	D	c		A	Yes	<u> </u>					
	ETB	32	D	c		A	Yes	1					
Ethylbenzene	EBT	20	<u> </u>	<del>-</del>		- <u>^</u>	Yes	1					
Ethyl butanol	EBE	41	<u> </u>	c		$\frac{\hat{A}}{A}$	Yes	1					
Ethyl tert-butyl ether	EBR	34	D	<u> </u>		A	Yes	1		·			
Ethyl butyrate	ECY	31	D	D		$\frac{\hat{A}}{A}$	Yes	1					
Ethyl cyclohexane		20 2	<del></del>	E			Yes	1					
Ethylene glycol	EGL	34	_ <u>_</u>	<u>-</u>			Yes						
Ethylene glycol butyl ether acetate	EMA					A	Yes	1					
Ethylene glycol diacetate	EGY	34	<u>D</u>	_E		A		<del></del>					
Ethylene glycol phenyl ether	EPE	40	<u>D</u>	<u>E</u>		A	Yes			• • • • • • • • • • • • • • • • • • • •			
Ethyl-3-ethoxypropionate	EEP	34	<u> D</u>	D E		A	Yes	1					
2-Ethylhexanol	EHX	20	<u> </u>										
Ethyl propionate	EPR	34	<u>D</u>	<u>c</u>		<u> </u>	Yes	<u> </u>					
thyl toluene	ETE	32	<u>D</u>	<u>D</u>		A .	Yes	1					
Formamide	FAM	10	D	E		A		<u>-</u>					
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	E		_ <u>A</u>	Yes						
Sasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1					
Sasoline blending stocks: Reformates	GRF	33	D	A/C		A	Yes						
Sasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	c 		A .	Yes	1					
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	C		A	Yes		grade and the second second second				
Gasolines: Casinghead (natural)	GCS	33	_ <u>D</u>	A/C			Yes						
Gasolines: Polymer	GPL	33	D	A/C		<u>A</u>	Yes	1					
Gasolines: Straight run	GSR	33	<u>D</u>	A/C		_ <u>A</u>	Yes	1 1					
Glycerine	GCR	20 <sup>2</sup>	D	E		_ <u>A</u>	Yes	<u>-</u>					
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	<u> </u>		<u> </u>	Yes						
Heptanoic acid	HEP	4	<u>D</u>	_ <u>E</u>		<u>A</u>	Yes	1		•			
Heptanol (all isomers)	нтх	20	<u>D</u>	D/E		A	Yes	1					
Haptene (all isomers)	HPX	30	D	<u> </u>		A	Yes	2					
Heptyl acetate	HPE	34	<u>D</u>	<u>E</u>		<u>A</u>	Yes						
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	<u>D</u>	B/C		<u>A</u>	Yes						
Hexanolc acid	НХО	4	D	E		<u> </u>	Yes						
Hexanol	HXN	20	D	D		<u> </u>	Yes	1					
Haxene (all isomers)	HEX	30	D	С		A	Yes						
Hexylene glycol	HXG	20	D	E		A	Yes						
Isophorone	IPH	18 <sup>2</sup>	<u> </u>	E		A	Yes						
Jet fuel: JP-4	JPF	33	D	E		<u> </u>	Yes						
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	<u>D</u>		<u> </u>	Yes						
Kerosene	KRS		D	<u> </u>		<u>A</u> _	Yes						
Methyl acetate	MTT		D	D		_ <u>A</u> _	Yes						
Methyl alcohol	MAL	20 <sup>2</sup>	D	С		A_	Yes						
Methylamyl acetate	MAC		D	D		<u>A</u>	Yes						
Methylamyl alcohol	MAA	20	<u>D</u>	D		A	Yes						
Methyl amyl ketone	MAK		D	D		A	Yes						
Methyl tert-butyl ether	MBE	41 2	D	С		Α	Yes	11_					

Certificate of Inspection

Serial #: C1-1500951

Cargo Authority Attachment

Vessel Name: KIRBY 10063

Shipyard: TRINITY MARINE, ASHLAND CITY, TN

Hull#: 5116

Official#: 1258673

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Cargo Identifica	tion					Conditions of Carriage							
Name Name	Chem Code MBK	Compat Group No 18	Sub Chapter D	Grade C	Hull Type	Tank Gmus	App'd (Y or N) Yes	Recovery VCS Category 1	Special Requirements in 48 CFR 151 General and Matts of	Insp. Perio			
Methyl butyl ketone	MBU	34		c		A	Yes	1					
Methyl butyrate	MEK	18 <sup>2</sup>	_ <u>D</u>	c		A	Yes	1					
Methyl ethyl ketone		18	D	<del>-</del>		$\frac{\Lambda}{A}$	Yes	<del>_</del>					
Methyl heptyl ketone	MHK	18 2	D	c			Yes	1					
Methyl Isobutyl ketone	MIK		<del>-</del>	E			Yes	1					
Methyl naphthalene (moiten)	MNA	32											
Mineral spirits	MNS	33	<u>D</u>	<u>D</u>		<u>A</u>	Yes						
Myrcene	MRE	30	<u>D</u>	D		A	Yes						
Naphtha: Heavy	NAG	33	<u>D</u>	#		<u> </u>	Yes						
Naphtha: Petroleum	PTN	33	<u>D</u>	#		<u>A</u>	Yes	1		<b>-</b>			
Naphtha: Solvent	NSV	33	D	D		<u> </u>	Yes						
Naphtha: Stoddard solvent	NSS	33	D	D		Α	Yes	1					
Naphtha: Varnish makers and painters (75%)	NVM	33	D	C		Α	Yes	1					
Nonane (ali isomers), see Alkanes (C6-C9)	NAX	31	D	<u>D</u>		<u> </u>	Yes						
Nonene (all isomers)	NON	30	D	D		Α	Yes	2					
Nonyi alcohol (ali isomers)	NNS	20 <sup>2</sup>	D	E		Α	Yes	1					
Nonyl phenol	NNP	21	D	Е		Α	Yes	1					
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		Α	Yes	1					
Octane (all Iscmers), see Alkanes (C6-C9)	OAX	31	D	C		Α	Yes	1					
Octanoic acid (all isomers)	OAY	4	D	Е		A	Yes	1					
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	E		Α	Yes	1					
Octene (all Isomers)	OTX	30	D	С		Α	Yes	2					
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1					
Oil, fuel: No. 2-D	OTD	33	D	D		Α	Yes	11					
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	1					
Oil, fuel: No. 5	OFV	33	D	D/E		A	Yes	1					
Oil, fuel: No. 6	OSX	33	D	E		Α	Yes	1					
Oil, misc: Crude	OIL	33	D	A/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	and the second s				
Oil, mise: Lubricating	QLB	33	D	E		Α	Yes	1					
Oil, misc: Residual	ORL	33	D	E		A	Yes	1					
Oil, misc: Turbine	OTB	33	D	E		Α	Yes	1					
Pentane (all isomers)	PTY	31	D	Α		A	Yes	5					
Pentene (all isomers)	PTX	30	D	Ä		A	Yes	5					
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1					
alpha-Pinene	PIO	30	D	D		A	Yes	1					
beta-Pinene	PIP	30				A	Yes	1					
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	E		A	Yes	1					
	PAF	34	_ <u></u>	Ē		A	Yes	1					
Poly(2-8)aikylene glycol monoalkyl(C1-C8) ether acetate	PLB	30		Ē		<u></u>	Yes	1					
Polybutene Polymonytone styrel	PGC	40	<u>D</u>	E		Â	Yes	<u>;</u>					
Polypropylene glycol	IAC	34	<u> </u>	c	•	A	Yes	<del>`</del>					
Iso-Propyl acetate	PAT	34	<u> </u>	<u> </u>		<del></del>	Yes	! 1					
n-Propyl acetate		20 2	- <u>D</u>	c		<u> </u>	Yes	1					
iso-Propyi alcohol	IPA BAL						Yes	1					
n-Propyl alcohol	PAL	20 2	<u> </u>	C			Yes	<u>1</u>					
Propylbenzene (all isomers)	PBY	32	D	D		A A	Yes	1 1					



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Serial #: C1-1500951 Dated: 11-Mar-15



# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10083

Shipyard: TRINITY MARINE, ASHLAND CITY, TN

Hull #: 5116

Official #: 1258673

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Cargo Identific	ation					Conditions of Carriage							
Name Propylene glycol	Chem Code PPG	Compat Group No 20 <sup>2</sup>	Sub Chapter D	Grade E	Hull Type	Tank Group A	App'd (Y or N) Yes	Recovery VCS Category 1	Special Requirements in 48 CFR 151 General and Matts of	Insp. Period			
Propylene glycol methyl ether acetate	PGN	34	D	D		A	Yes	1	***************************************				
Propylene tetramer	PIT	30	D	D		Α	Yes	1	· · · · · · · · · · · · · · · · · · ·				
Sulfolane	SFL	39	D	E		Α	Yes	1	The state of the s				
Tetraethylene glycol	TTG	40	D	E		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 crtho isomer)	TCP	34	D	E		Α	Yes	1		-			
Triethylbenzene	TEB	32	٥	E		Α	Yes	1					
Triethylene glycol	TEG	40	D	E		Α	Yes	1					
Triethyl phosphate	TPS	34	D	E		A	Yes	1	***				
Trimethylbenzene (all Isomers)	TRE	32	D	{D}		Α	Yes	1					
Trixylenyi phosphate	TRP	34	D	E		A	Yes	1					
Undecene	UDC	30	D	D/E		Α	Yes	1		••			
1-Undecyl alcohol	UND	20	D	E		Α	Yes	1					
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		A	Yes	1					





# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRRY 10083

Official #: 1258673

Page 8 of 8

Shipyard: TRINITY MARI

Serial #: C1-1500951

Hull#: 5116

#### Explanation of terms & symbols used in the Table;

Cargo Identification

The proper shipping name as listed in 48 CFR Table 30.25-1, 48 CFR Table 151.05, and 48 CFR Part 153 Table 2.

The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual. Certain modures of cargoes may not have a CHRIS Code assigned. Chem Code

Compatability Group No.

The cargo reactive group number assigned for compatibility determinations in 48 CFR Part 150 Tables I and II. In accordance with 48 CFR 150,130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 48 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-

Note 1

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

Subchapter Subchapter D Subchapter O 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 15.05 and 48 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-occanging barges.

Grade

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 Were not vermed by the control of cargo.

Flammable figuid cargoes, as defined in 48 CFR 30-10.22.

Combustible liquid cargoes, as defined in 48 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 cardoes and desired the cargoes data and ensure that the barge is authorized for carriage of that grade of cargo.

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

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

**Hull Type** 

NA

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 produce the uncontrolled release of the cargo. See 48 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 Recover 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 cards 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.

(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 39.170, 46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate inclion 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, Marina 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

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

(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 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.