

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

Certification Date: 08 May 2023 Expiration Date: 08 May 2028

# 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 Numl	ber	IMO	Number		Call Sign	Service	
KIRBY 1025	5		1246434						43 TUA	Barne
KIRD I 1025	5		1240434	+					Tank	Daige
Hailing Port	5.		Ltraff	Material		Horsepow	une.	Propulsion		
WILMINGTO	)N, DE					norsepow	er	Propusion		
			516	eel						
UNITED ST	ATES							89		
	•									
Place Built			Delivery	Date	Keel Laid Date	. (	Gross Tons	Net Tons	DWT	Length
Ashland City	, TN		7555		004004	_ F	R-705	R-705	103004	R-200.0
	. ===		13Ma	ay2013	23Apr201	ي ا	,	F		1-0
UNITED STA	ATES									
Owner	ND 144 DW := : =					erator				
	ND MARINE LP DRIVE STE 1000	n					INLAND 1/2 DE Z	MARINE, LP		
HOUSTON,		U						/, TX 77530		
UNITED STA							STATE	•		
	nust be manned								hich there n	nust be
0 Certified Li	feboatmen, 0 Ce	rtified Ta	nkermen,	0 HSC	Type Ratin	ng, and	0 GMD	SS Operators.		
0 Masters	0	Licensed M	lates	0 Chief	Engineers		0.0	ilers		
0 Chief Mate	-	First Class		0 First /	Assistant Engi	ineers				
0 Second Ma		Radio Offic			nd Assistant E	-	75			
0 Third Mate	-	Able Seam			Assistant Eng	-				
		Ordinary S			sed Engineers					
0 Mate First		Deckhands			ied Member E	_				
In addition, the Persons allow		irry 0 Pas	sengers,	0 Other	Persons in	ı crew	, 0 Perso	ns in addition t	o crew, and	no Others, Total
										·
i	nitted And Cond		•	on:						
Lakes,	Bays, and S	ounds-								
LIMITED COA	STWISE SERVICE:	IN SEAS	OF LESS	THAN	THREE (03)	FEET	, WIND !	LESS THAN TWE	NTY (20) KN	OTS AND CLEAR
	NOT MORE THAN									
										INED INSPECTION ITS TANK BARGE
	(TAP). INSPECT									
***SEE NE	XT PAGE FOR	ADDITIC	NAL CE	RTIFIC	CATE INFO	DRMA	TION***			
										n Charge, Marine
				l, in all i	respects, is	in cor	iformity v	vith the applica	ble vessel in	spection laws and
the rules and	regulations presonal/Perio				-	·				
					-	Ihis		e issued by:		
Date	Zone	A/P/R		Signatu				), BACON, CD	R USGG! B	y Direction
2-16-2024	BTE.LA. 18517	A	Dame	11 Can	m	Officer	in Charge, M	aprie Inspection	Dar	for .
					<i>U</i>		/	- diouma	Louisiana	
	<del></del>					Inspect	ion Zone			



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

Certification Date: 08 May 2023 **Expiration Date:** 08 May 2028

## Certificate of Inspection

Vessel Name: KIRBY 10255

THIS VESSEL HAS BEEN GRANTED A FRESH WATER SERVICE EXAMINATION INTERVAL IN ACCORDANCE WITH 46 CFR TABLE 31.10-21(b); IF THIS VESSEL IS OPERATED IN SALT WATER MORE THAN SIX (6) MONTHS IN ANY TWELVE (12) MONTH PERIOD, THE VESSEL MUST BE INSPECTED USING SALT WATER INTERVALS PER 46 CFR TABLE 31.10-21(a) AND THE COGNIZANT OCMI NOTIFIED IN WRITING AS SOON AS THIS CHANGE IN STATUS OCCURS.

### ---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

31May2033

02May2023

13May2013

Internal Structure

31May2028

02May2023

21May2018

### --- 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

10300

Barrels

Yes

No

No

(lbs/gal)

### \*Hazardous Bulk Solids Authority\*

### \*Loading Constraints - Structural\*

Tank Number	Max Cargo Weight per Tank (short tons)	Maximum Density (
1C	600	13.6
2C	553	13.6
3C	550	13.6

### \*Loading Constraints - Stability\*

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
П	1407	8ft 9in	13.6	R, LBS
Ш	1622	9ft 9in	13.6	R, LBS

### \*Conditions Of Carriage\*

ONLY THOSE HAZARDOUS CARGOES NAMED IN THE VESSEL'S CARGO AUTHORITY ATTACHMENT, SERIAL NO. C1-1301371, DATED MAY 1, 2013, MAY BE CARRIED AND THEN ONLY IN THE TANKS INDICATED, SUBJECT TO THE LOADING CONSTRAINTS OF THE VESSEL'S CURRENT STABILITY LETTER.

PER 46 CFR 150.130, THE PERSON IN CHARGE OF THE BARGE 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 REACTIVE GROUP NUMBER FROM THE "COMPATIBILITY GROUP NO." COLUMN 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 U.S. CODE OF FEDERAL REGUALTIONS PART 197, SUBPART C ARE APPLIED.

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.

THE MAXIMUM DESIGN DENSITY OF CARGO WHICH MAY BE FILLED TO THE TANK TOP IS 9.99 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.



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

Certification Date: 08 May 2023 Expiration Date: 08 May 2028

## Certificate of Inspection

Vessel Name: KIRBY 10255

IN ACCORDANCE WITH 46 CFR PART 39, EXCLUDING PART 39.4000, THIS VESSEL'S VAPOR CONTROL SYSTEM HAS BEEN INSPECTED TO THE PLANS APPROVED BY MARINE SAFETY CENTER LETTERS SERIAL NO. C1-1301371 DATED 01 MAY 2013, AND FOUND ACCEPTABLE FOR COLLECTION OF BULK LIQUID CARGO VAPORS ANNOTATED WITH "YES" IN THE CAA'S VCS COLUMN.

### --- Inspection Status ---

\*Fuel Tanks\*

Internal Examinations

Tank ID

Previous

Next

machinery deck

13May2013

Last

\*Cargo Tanks\*

	Internal Exam			External Exam	i	
Tank Id	Previous	Last	Next	Previous	Last	Next
1C	13May2013	02May2023	31May2033	- 9	<b>-</b> ×	-
2C	13May2013	02May2023	31May2033	-		_
3C	13May2013	02May2023	31May2033	<b>F</b>	<b>≅</b> ,,	=:
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1C	=		(=		-	
2C			-	-	-	
3C	_					

## --- 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\*\*\*

Serial #:

C1-1301371

01-May-13



# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10255

Shipyard: Trinity Marine

Hull #: 4907

Official #: 1246434

Fank Group Information Cargo Identification			Caroo	Tanks			Cargo Transfer		Enviror Control		Fire	Special Requirements					
Tnk Grp Tanks in Group	Density	Press.	Temp.		Seg	_	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1C, #2C, #3C	13.6	Atmos.	Elev	- 11	1ii 2ii	Integral Gravity	PV	Closed	п	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), (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					Conditions of Carriage							
							Vapor Re	ecovery					
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									7/				
Acetonitrile	ATN	37	0	С	111	Α	Yes	3	No	G			
Acrylonitrile	ACN	15 2	0	С	11	Α	Yes	4	.50-70(a), 55-1(e)	G			
Adiponitrile	ADN	37	0	Ε	11	Α	Yes	1	No	G			
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	111	Α	No	N/A	.50-81, .50-86	G			
Aminoethylethanolamine	AEE	8	0	E	111	Α	Yes	1	.55-1(b)	G			
Ammonium bisulfite solution (70% or less)	ABX	43 2	0	NA	111	Α	No	N/A	.50-73, .56-1(a), (b), (c)	G			
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	111	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G			
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	11	Α	No	N/A	No	G			
Benzene	BNZ	32	0	С	111	Α	Yes	1	.50-60	G			
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 2	0	С	111	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	III	Α	Yes	1	.50-60	G			
Butyl acrylate (all isomers)	BAR	14	0	D	111	A	Yes	2	.50-70(a), .60-81(a), (b)	G			
Butyl methacrylate	вмн	14	0	D	111	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)	CPO	18	0	D	11	Α	No	N/A	No	G			
Carbon tetrachloride	CBT	36	0	NA	111	Α	No	N/A	No	G			
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	III	Α	No	N/A	50-73, 55-1(j)	G			
Caustic soda solution	css	5 2	0	NA	111	Α	No	N/A	.50-73. 55-1(j)	G			
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	Α	No	N/A	.50-73	G			
Chlorobenzene	CRB	36	0	D	111	Α	Yes	1	No	G			
Chloroform	CRF	36	0	NA	111	Α	Yes	3	No	G			
Coal far naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	50-73	G			
Coal tar pitch (molten)	CTP	33	0	Ε	111	Α	No	N/A	50-73	G			
Creosote	CCM	21 2	0	Ε	111	Α	Yes	1	No	G			
Cresols (all isomers)	CRS	21	0	E	111	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	CRX		0	E	111	Α	Yes	1	.55-1(f)	a			
Crotonaldehyde	CTA	19 2	0	C	11	Α	Yes	4	.55-1(h)	G			
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	111	Α	No.	N/A	No	G			
Cyclohexanone	ССН	18	0	D	111	Α	Yes	1	.58-1(a). (b)	G			
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	0	Е	111	Α	Yes	1	.50-1 (b)	G			

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

Dated: 01-May-13



# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10255

Official #: 1246434

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Shipyard: Trinity Marine

Cargo Identificatio	n					Conditions of Carriage						
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Huli Type	Tank Group	App'd	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ts of	Insp. Perior		
Cyclohexylamine	CHA	7	0	D	111	Α	Yes	1	.56-1(a), (b), (c), (g)	G		
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	111	Α	Yes	1	.50-60, .56-1(b)	G		
so-Decyl acrylate	IAI	14	0	E	111	Α	Yes	2	.50-70(a), 50-81(a), (b), 55-1(c)	G		
Dichlorobenzene (all isomers)	DBX	36	0	E	Ш	Α	Yes	3	.56-1(a), (b)	G		
1,1-Dichloroethane	DCH	36	0	С	111	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 acld, diethanolamine salt solution	DDE	43	0	E	H	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1.	0	A	111	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	Ε	111	Α	No	N/A	.50-1(a), (b), (c), (g)	G		
1,1-Dichloropropane	DPB	36	0	C	111	Α	Yes	3	No	G		
1,2-Dichloropropane	DPP	36	0	С	H	Α	Yes	3	No	G		
1,3-Dichloropropane	DPC		0	С	111	Α	Yes	3	No	G		
1,3-Dichloropropene	DPU		0	D	11	Α	Yes	. 4	No	G		
Dichloropropene, Dichloropropane mixtures	DMX		0	С	11	Α	Yes	. 1	No	G		
Diethanolamine	DEA	Contract to the Color State of	0	E	III	Α	Yes		55-1(c)	G		
Diethylamine	DEN		0	c	111	A	Yes		.55-1(c)	G		
	DET		0	E	111	Α	Yes		.55-1(c)	G		
Diethylenetriamine	DBU		0	۵	111	A	Yes		.55-1(c)	c		
Diisobutylamine	DIP	8	0	E	111	A	Yes		.55-1(c)	G		
Diisopropanolamine	DIA	7	0	C	II.	A	Yes		.55-1(c)	G		
Dilsopropylamine	DAC		0	E	111	A	Yes		.56-1(b)	G		
N.N-Dimethylacetamide	DME	and the street of the street of the state of	0	D	111	A	Yes	The state of the Sale of the Sales of the Sa	50-1(b), (c)	G		
Dimethylethanolamine	DMF	Andrea Santa Santa Market Market Santa	0	D	111	A	Ye		.55-1(e)	G		
Dimethylformamide	DNA		0	C	11	A	Ye		.55·1(c)	G		
Di-n-propylamine			0	E	111	A	No		.56-1(b)	G		
Dodecyldimethylamine, Tetradecyldimethylamine mixture	001	40 - C T - C 100 - C 10		A			enangelian musika		The second secon	G		
Dodecyl diphenyl ether disulfonate solution	DOS		0	#	H 	Α.	No		The state of the s	G		
EE Glycol Ether Mixture	EEC		0	D	111	A	No		.55-1(c)	G		
Ethanolamine	ME		0	C	111	A	Yo Ye		50-70(a), 50-81(a), (b)	G		
Ethyl acrylate	EAC		0		111	A			55-1(b)	G		
Ethylamine solution (72% or less)	EAN	where the property with a reservoir	0	A	!!	A	Ye		.55-1(b)	Ģ		
N-Ethylbutylamine	EBA		0	D		Α.	Ye		.55-1(b)	G		
N-Ethylcyclohexylamine	ECC	*****	0	D	111	A	Ye		No	G		
Ethylene cyanohydrin	ETC		0	Ε.	111	A	Ye		.55-1(c)	G		
Ethylenediamine	EDA			D	111	Α.	Ye		CONTRACTOR OF THE PROPERTY OF	G		
Ethylene dichloride	EDO			С	10	Α	Ye		No A No	G		
Ethylene glycol hexyl ether	EGI	-	0	E	111	A	No			G		
Ethylene glycol monoalkyl ethers	EG		0	D/E		A	Ye		No	G		
Ethylene glycol propyl ether	EGI	> 40	0	E	111	A	Ye		No .50-70(a), .50-81(a), (b)	0		
2-Ethylhexyl acrylate	EAI		0	Ε.	111	Α.	Ye			G		
Ethyl methacrylate	ETM		0	D/E			Ye		.50-70(a)	G		
2-Ethyl-3-propylacrolein	EPA			E	- 111		Ye		No	G		
Formaldehyde solution (37% to 50%)	FM:			D/E			Ye		.55-1(h)	G		
Furfural	FFA		0	D	111		Ye		.55-1(h)	G		
Glutaraldehyde solution (50% or less)	GT.		0	NA	*******		No			G		
Hexamethylenediamine solution	HM		0	E	111		Ye		.55-1(a) .56-1(b), (c)	G		
Hexamethyleneimine	НМ	1 7	0	С	11	Α	Υe	es 1	50-70(a), 50-81(a), (b)	G		



01-May-13

Cargo Authority Attachment

Vessel Name: KIRBY 10255

Official #: 1246434

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Shipyard: Trinity Marine

Cargo Identification	l						(	Condi	tions of Carriage	
	Г						Vapor R	ecovery	······································	
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. Perio
coprene	IPR	30	0	Α	111	Α	Yes	7	.50-70(a), 50-81(a), (b)	G
soprene, Pentadiene mixture	IPN		0	В	111	Α	No	N/A	.50-70(a), .55-1(c)	G
naft pulping liquors (free alkali content 3% or more)(including: Black, ireen, or White liquor)	KPL	5	0	NA	111	A	No	N/A	.50-73, .56-1(a), (c), (g)	G
lesityl oxide	MSO	18 2	0	D	111	Α	Yes	1	No	G
Methyl acrylate	MAM	14	0	С	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	C
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	Na	G
Methyl diethanolamine	MDE	8	0	Ε	111	Α	Yes	1	.56-1(b). (c)	G
-Methyl-5-ethylpyridine	MEP	9	0	E	111	Α	Yes	1	.55-1(e)	G
Methyl methacrylate	MMM	1 14	0	С	111	Α	Yes	2	50-70(a), 50-81(a), (b)	G
-Methylpyridine	MPR	9	0	D	111	A	Yes	3	55-1(c)	G
Additional to the control of the property of the control of the co	MSR	30	0	D	111	Α	Yes	2	50-70(a), 50-81(a), (b)	G
Ilpha-Methylstyrene	MPL	7 2	0	D	HI	A	Yes	1	.55-1(c)	G
Aorpholine	NTE	42	0	D	11	A	No	N/A	.50-81, .56-1(b)	Ģ
Vitroethane	NPM	42	0	D	111	A	Yes		50-81	G
- or 2-Nitropropane	PDE	30	0	A	111	A	Yes		.50-70(a), 50-81	G
.3-Pentadiene	PER	36	0	NA.	10	Α	No	N/A	No.	G
Perchloroethylene							Yes		No	G
Phthalic anhydride (molten)	PAN	11	0	E	111	A			.55-1(a)	G
Polyethylene polyamines	PEB	7 2	0	E	111	Α.	Yes		.55-1(c)	G
so-Propanolamine	MPA	8	0	E		A	Yes			G
Propanolamine (iso-, n-)	PAX	8	0	E	111	ΑΑ	Yes	****	56-1(b), (c)	
so-Propylamine	IPP	7	0	Α	- 11	A	Yes	-	55-1(c)	G
Pyridine	PRD	9	0	С	111	Α	Yes	1	.55-1(c)	G
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		0		Ш	Α	No	N/A	and the second of the second second of the second s	G
Sodium aluminate solution (45% or less)	SAU	5	0	NA	111	Α	No	N/A	1 .50-73, .56-1(a), (b), (c)	G
Sodium chlorate solution (50% or less)	SDD	0 1	.2 0	NA	111	Α	No	N/A	<b>4</b> 50-73	G
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	111	Α	No	N/A	A .50-73, 56-1(a), (b)	G
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 1	2 0	NA	111	Α	Yes	s 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 O	NA	Ш	А	No	N/	Δ .50-73, .55-1(b)	G
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1	.2 0	NA	II	Α	No	N/	A .50-73, .55-1(b)	G
Styrene (crude)	STX		0	D	Ш	Α	Yes	s 2	No	G
Styrene monomer	STY	30	0	D	111	А	Ye	s 2	.50-70(n)50-81(a), (b)	G
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	111	A	No	N/	A No	G
Tetraethylenepentamine	TTP	7	0	Ε	111	A	Ye	s 1	.55-1(c)	G
A STATE OF THE PROPERTY OF THE	THE		0	C	111		Ye	****	.50-70(b)	G
Tetrahydrofuran	TDA		0	E	П		No		A .50-73, 56-1(a), (b), (c), (g)	G
Toluenediamine	TCB		0	E	111		Ye		. The second contract of the second contract	G
1,2,4-Trichlorobenzene	TCM	40 to 192 198 198 198 198 198	0	NA			Ye		50-73, 56-1(a)	G
1,1,2-Trichloroethane	TCL		. 33	NA			Ye		No	G
Trichloroethylene			0	E	11		Ye		50-73, .56-1(a)	G
1,2,3-Trichloropropane	TCN								55-1(b)	G
Triethanolamine	TEA			E	- 111	and the first of the principle of the			.55-1(e)	G
Triethylamine	TEN		0	C	!!		Ye	Contraction and the second	55-1(b)	G
Triethylenetetramine	TET		-	E	!!					G
Triphenylborane (10% or less), caustic soda solution	TPE		0	NA						G
Trisodium phosphate solution	TSF		0	NA					in the contract of the contrac	
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	11	1 A	No	N/	A 56-1(b)	G



C1-1301371

# Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 10255

Official #: 1246434

Page 4 of 8

Shipyard: Trinity Marine

Cargo Identificatio	n					Conditions of Carriage					
							The same of the sa	Recovery		1.	
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	(Y or N)	VCS Category		Insp. Perio	
/inyl acetate	VAM	13	0	С	Ш	Α	Yes	2	.50-70(a), 50-81(a), (b)	G	
/inyl neodecanate	VND	13	0	E	111	Α	No	N/A	the state of the s	G	
/inyltoluene	VNT	13	0	D	111	Α	Yes	2	.50-70(a), 50-81, 56-1(a), (b), (c), (	G	
Subchapter D Cargoes Authorized for Vapor Conti	rol										
Acetone	ACT	18 2	D	С	a particular we	Α	Yes	1			
	ACP	18	D	E		Α	Yes	1			
Acetophenone	APU	20	D	E	A CAMPAGE TO SPECIAL PROPERTY.	A	Yes	1	ngga a kanta pagamanny ata paramata a ana a maga ndan na anakanda ana a ki a fanan a ki ni amanan kan anakan k	***	
Alcohol(C12-C16) poly(1-6)ethoxylates	AEB	20	D	E		Α	Yes	1	THE REPORT OF THE PROPERTY OF	and the second second second	
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEC	34	D	D		Α	Yes	1			
Amyl acetate (all isomers)				D		A	Yes	1			
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D					1			
Benzyl alcohol	BAL	21	<u>D</u>	E		A	Yes	1			
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyaikylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		A	Yes		en er somhender en halle kriger plensmensk den make men et eller klabiskrigerisken me	and the second second second	
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1	and the second of the second	and the second second second	
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	articalism substitution as more statistical per	D	C		Α	Yes	1	ACTIVITIES OF THE PROPERTY OF		
Control of the Contro	BPH	34	D	E	COLUMN WINE PROPERTY	Α	Yes	1			
Butyl benzyl phthalate	BUE	32	D	D		Α	Yes	1			
Butyl toluene	CLS	22	D	E		A	Yes	1	page of a final of the Mark State of the Sta	of party of products of	
Caprolactam solutions		31	D	C	and the second	A	Yes	1	the state of the s		
Cyclohexane	CHX			E		A	Yes	1	44.4. 1. g/g/s44.1. (40.00) g/s/s/s/s/s/s/s/s/s/s/s/s/s/s/s/s/s/s/s		
Cyclohexanol	CHN	20	D		a landingsingsin pad Pila Hall Ingers		Yes	2	and with a consequent comparement for a transfer comparement or district and with a first sector between the con-		
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E	4-1-1-5	A	and the second law and	te comprese to be seen	and the state of t		
p-Cymene	CMP	32	D	D		Α	Yes	1	and and a supplemental property of the contract of the contrac		
iso-Decaldehyde	IDA	19	D	Е		Α	Yes	1			
n-Decaldehyde	DAL	19	D	E		Α	Yes				
Decene	DCE	30	D	D		A	Yes	. 1			
Decyl alcohol (all isomers)	DAX	20 2	D	E		A	Yes		and the second s		
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	Ε		Α	Yes	1			
Diacetone alcohol	DAA	20 2	D	D		Α	Yes	1	ranga kan dalaman kan 1974 Arabarah ranga dan perjahan sebagai kan dapan dalam san san san san san san san san		
ortho-Dibutyl phthalate	DPA	34	D	E		Α	Yes	. 1		a anathra ta materia	
Diethylbenzene	DEB	32	D	D	2 MARKET BOX	Α	Yes	1			
Diethylene glycol	DEG	ALBORITA COMMENCIONISTA	D	E		Α	Yes	. 1	THE RESIDENCE OF THE PARTY OF T		
	DBL	30	D	С		Α	Yes	. 1			
Diisobutylene	DIK	18	D	D		A	Yes				
Diisobutyl ketone	DIX	32	D	E		Α	Yes	mark of an extension			
Diisopropylbenzene (all isomers)	DTL	34	D	E		A	Yes		de automorphise de la destablica de la propriété de la composition della composition	THE PERSON NAMED IN COLUMN	
Dimethyl phthalate	DOF		D	E		A	Yes				
Dioctyl phthalate			D	D	in the second second second	A	Yes		Adaption Company of the Company of t		
Dipentene	DPN					A	Yes				
Diphenyl	DIL	32	D	D/E							
Diphenyl, Diphenyl ether mixtures	DDC		D	E		A	Yes		Caragonal of the commencer state of the contract of the contra		
Diphenyl ether	DPE		D	(E)		Α	Yes		was make the sent of the sent	TO STREET SERVICE OF THE STREET	
Dipropylene glycol	DPC		D	E		Α.	Yes	(mat. ) (mat. ) (1 )			
Distillates: Flashed feed stocks	DFF	******	D	Ε		A	Yes	market and the state of the sta			
Distillates: Straight run	DSF		D	E		A	Ye				
Dodecene (all isomers)	DO	2 30	D	D		Α	Ye	s 1			



Serial #: C1-1301371 Dated: 01-May-13

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: KIRBY 10255

Official #: 1246434

Page 5 of 8

Shipyard: Trinity Marine

Cargo Identification	n					Conditions of Carriage						
	1	1						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		
Oodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		Α	Yes	1				
-Ethoxyethyl acetate	EEA	34	D	D		Α	Yes	1				
Ethoxy triglycol (crude)	ETG	40	D	Ε		Α	Yes	1				
Ethyl acetate	ETA	34	D	С		Α	Yes	1	and the second section of the second section of the second section of the second secon			
Ethyl acetoacetate	EAA	34	D	E		Α	Yes	1				
Ethyl alcohol	EAL	20 2	D	С		Α	Yes	1				
Ethylbenzene	ETB	32	D	С	and the same of the same	Α	Yes	1		Market and the Asset		
Ethyl butanol	EBT	20	D	D		Α	Yes	1	The state of the s			
Ethyl tert-butyl ether	EBE	41	D	C		Α	Yes	1	Control Marie William Agric Colds and the Agri			
Ethyl butyrate	EBR	34	D	D		Α	Yes	1				
Ethyl cyclohexane	ECY	31	D	D		A	Yes	1		n Edmands in Chemistre Track		
Ethylene glycol	EGL	20 2	D	E		Α	Yes	1		o de la comitación de principal de la cidida		
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1				
Ethylene glycol diacetate	EGY	34	D	E		Α	Yes	1				
Ethylene glycol phenyl ether	EPE	40	D	E		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	C		Α	Yes	1	and the second s	programmer (SA) ()		
Ethyl toluene	ETE	32	D	D		Α	Yes	1				
Formarnide	FAM	10	D	Е		Α	Yes	1				
Furfuryl alcohol	FAL	20 2	D	E		Α	Yes	1		F. Commenting Sectionary Street		
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		A	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		D	A/C		A	Yes		approximate the confidence of			
Glycerine	GCR	20 2	D	E		Α	Yes	1	and the state of t			
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1				
Heptanoic acid	HEP	4	D	E	and the state of t	Α	Yes	1		description of		
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1				
Heptene (all isomers)	HPX	30	D	С	Speciment and the second	Α	Yes	2				
Heptyl acetate	HPE	34	D	E		Α	Yes	1				
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 2	D	B/C		Α	Yes	. 1	promise the state of the state			
Hexanoic acid	HXC	) 4	D	E		Α	Yes	; 1				
Hexanol	HXN	4 20	D	D		Α	Yes	1				
Hexene (all isomers)	HEX	30	D	С	n and the second second	Α	Yes	; 2	**************************************			
Hexylene glycol	HXC	3 20	D	E	marked but are	Α	Yes	1				
Isophorone	IPH	18 2	D	Е	and the latest territories	Α	Yes	; 1				
Jet fuel: JP-4	JPF	33	D	E		Α	Yes	; 1				
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		Α	Yes	5 1	yan majaka tanik nik mikataina ni Armaniya (Armaniya) aya abanyayi ya kata asal kamunin ya ta ta kiki wata s			
Kerosene	KRS	33	D	D		Α	Yes	1				
Methyl acetate	MTT	r 34	D	D		Α	Yes	s 1	a maja di nondi di madagalanda ya ni abusa manan maja na mili da ka dinka 🎻 ayanga si gababan di an ka	namen der har nach		
Methyl alcohol	MAL	_ 20 <sup>2</sup>	D	С	. h. day . made a limi	Α	Yes	3 1				
Methylamyl acetate	MAG	34	D	D		Α	Yes	3 1	parameter of a responsible parameter and the second			
Methylamyl alcohol	MA	A 20	D	D		Α	Ye	s 1				



01-May-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10255

Official #: 1246434

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Shipyard: Trinity Marine

Name fethyl amyl ketone fethyl tert-butyl ether fethyl butyl ketone fethyl butyrate fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone fethyl naphthalene (molten)	Chem Code MAK MBE MBK MBU MEK MHK	Compat Group No 18 41 <sup>2</sup> 18 34 18 <sup>2</sup>	Sub Chapter D D	D	Hull Type	Tank Group	Vapor F App'd (Y or N)	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp.
fethyl tert-butyl ether fethyl butyl ketone fethyl butyrate fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone	MBE MBK MBU MEK MHK	41 <sup>2</sup> 18 34	D	ere era carteria						
fethyl tert-butyl ether fethyl butyl ketone fethyl butyrate fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone	MBE MBK MBU MEK MHK	41 <sup>2</sup> 18 34		^		A	Yes	1	<del> </del>	
lethyl butyl ketone fethyl butyrate fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone	MBU MEK MHK	34	۵	C	4120044100	Α	Yes	1		
fethyl butyrate fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone	MBU MEK MHK	34		C		Α	Yes	1		
fethyl ethyl ketone fethyl heptyl ketone fethyl isobutyl ketone	MEK MHK		D	C		Α	Yes	1	and the second s	
fethyl heptyl ketone fethyl isobutyl ketone	мнк		D	C		Α	Yes	1		
lethyl isobutyl ketone	and the second second second	18	D	D		Α	Yes	1		
	14501.5	18 <sup>2</sup>	D	С		Α	Yes	1		
	MNA	32	D	E		A	Yes	1	der gegen de de sides e de de de management de mandante. Le transplat deux des la philosophilips des métydes y ved en présent de mi	Contraction for the state of
	MNS	33	D	D	and the second second	A	Yes	1	And the second control of the second control	
Aineral spirits	MRE	30	D	D		A	Yes	1		
Myrcene	NAG	33	D	#		A	Yes	1		
laphtha: Heavy	PTN	33	D	#	en de la companya de	Α	Yes	1		
Japhtha: Petroleum	NSV	33	D	D	of Audionality Control	A	Yes	1	a kida ya gina kidan ini kida yake ungkana sanan makana anana aninyi makengan ya mina kanana.	to all orders on the first of the
laphtha: Solvent				D		A	Yes	1		
laphtha: Stoddard solvent	NSS	33	D					1	and the second of the second control of the second of the	
Naphtha: Varnish makers and painters (75%)	NVM	33	D	C		Α	Yes	1	Charles on the first the charles are the contract to the contract of the con-	encount to a
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes			
Nonene (all isomers)	NON	30	D	D		A	Yes	2	Control of the second of the second of the second	and the designation of
Nonyl alcohol (all isomers)	NNS	20 2	0	E		Α	Yes			
Nonyl phenol	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		Α	Yes	. 1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С	M, 1, 11 (11 (11 (11 (11 (11 (11 (11 (11	Α	Yes	1		i manakina ta mbinamani.
Octanoic acid (all isomers)	OAY	4	D	E		Α	Yes	1	and a second of all and proportion of the proportion of the contract of the co	.,,
Octanol (all isomers)	OCX	20 2	D	E		Α	Yes	1		
Octene (all isomers)	OTX	30	D	С	ar a of Armena - 10,11	Α	Yes	2	a a plant of the law to the law of the state of the law to the law of the law	
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		Α	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 6	osx	33	D	Ε		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		Α	Yes	1		
Oil, misc: Lubricating	OLB	33	D	E		Α	Yes	1	and the second of the second o	
Oil, misc: Residual	ORL	33	D	E	eral a carro state arrows	Α	Yes	1		
Oil, misc: Turbine	ОТВ	33	D	Ε		Α	Yes	1	AND AND AND ASSESSMENT OF THE SAME	
Pentane (all isomers)	PTY	31	D	Α		Α	Yes		and the state of t	
the contract of the contract o	PTX		D	Α		Α	Yes		and the second of the second o	
Pentene (all isomers)	PPE	and American Princeton Princeton Princeton	D	D		A	Yes			
n-Pentyl propionate	PIO	30	D	D		Α	Yes			
alpha-Pinene	PIP	30	D	D		Α	Yes			
beta-Pinene	PAG	***	D	E	and an alternative	· A	Yes		the manufacture of the second state of the second state of the second of the second state of the second st	pro-section of antique
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAF		D.	E		A	Yes			
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PLB		D	E		A	Yes			
Polybutene				E		A	Yes			
Polypropylene glycol	PGC	******	D							
iso-Propyl acetate	IAC	34	D	C		A	Yes		NA, morte d'Agreeme et le trong anche des recopperation d'une tribigé d'accesse autrempter autres en manifest	and the second second
n-Propyl acetate	PAT		D	C		A	Yes			
iso-Propyl alcohol n-Propyl alcohol	IPA PAL	20 <sup>2</sup>	D	C		A	Yes			



Dated: 01May-13



# Certificate of Inspection

Cargo Authority Attachment

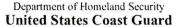
Vessel Name: KIRBY 10255

Official #: 1246434

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Shipyard: Trinity Marine

Cargo Identific	ation					Conditions of Carriage							
							Vapor F	Recovery		1			
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			
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1	**************************************				
iso-Propylcyclohexane	. IPX	31	۵	D		Α	Yes	1					
Propylene glycol	PPG	20 2	D	Ε		A	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	E		Α	Yes	1					
Tetraethylene glycol	TTG	40	D	E		Α	Yes	1					
Tetrahydronaphthalene	THN	32	D	E		Α	Yes	1					
Toluene	TOL	32	D	С		Α	Yes	1					
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		Α	Yes	1					
Triethylbenzene	TEB	32	D	Ε		Α	Yes	1					
Triethylene glycol	TEG	40	D	Ε		Α	Yes	1					
Triethyl phosphate	TPS	34	D	E		Α	Yes	1					
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1					
Trixylenyl phosphate	TRP	34	D	E	AMERICAN TO A TECHNOLOGY	Α	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		Α	Yes	1					



01-May-13





# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10255 Official #: 1246434

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Shipyard: Trinity Marine

Hull #: 4907

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

Cargo Identification

Name Chem Code

Compatability Group No.

Note 1 Note 2

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.

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.

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 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.

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 and ensure that the barge is authorized for carriage of

A, B, C D, E

Note 4

that grade of cargo.
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 Roid 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

Tank Group 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 loange 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

(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 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, Manne 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 mixture densities and vapor growth rates as compared to Category 1cargoes. 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 system