

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

Certification Date: 23 Jun 2020 Expiration Date: 23 Jun 2025

Certificate of Inspection

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

Vessel Name	Official Number	IMO Nurr	iber	Call Sign	Service
KIRBY 11516	1170771				Tank Barge
WILMINGTON, DE UNITED STATES	Hull Ma Stee		epower	Propulsion	
Place Built JEFFERSONVILLE, IN UNITED STATES	Delivery Di 08Aug		Gross Tons R-735 I-	Net Tons R-735	DWT Length R-200.0
Cowner KIRBY INLAND MARINE 55 WAUGH DR STE 100 HOUSTON, TX 77007 UNITED STATES This vessel must be mann	ned with the following lice	183 Cha UNI ensed and unlicense	BY INLAND 50 Market Sonnelview, TX TED STATE	(77530 S I. Included in	which there must be
O Certified Lifeboatmen, Control Masters O Chief Mates O Second Mates O Third Mates O Master First Class Pilot O Mate First Class Pilots	O Certified Tankermen, O O Licensed Mates O First Class Pilots O Radio Officers O Able Seamen O Ordinary Seamen	HSC Type Rating, Chief Engineers First Assistant Engine Second Assistant Engine Third Assistant Engine Licensed Engineers Qualified Member Eng	ers ineers eers	SS Operators	
In addition, this vessel ma Persons allowed: 0	y carry 0 Passengers, 0	Other Persons in c	rew, 0 Perso	ons in addition	to crew, and no Others. Total
Route Permitted And C	conditions Of Operation	1:		PAG.	

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at New Orleans, LA, UNITED STATES, the Officer in Charge, Marine Inspection, Sector New Orleans certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

the rules and	Annual/Periodi	c/Re-In	spection	This certificate issued by:
Date	Zone	A/P/R	Signature	M.K. COCAKAN COMMANDER, by direction
3-31-2021	BTR-LA-TESIP	A	Daniel Landry	Officer in Charge, Marine Inspection
	Raten Rouge	A	Scott Firmin	Sector New Orleans
5/31/23	Boto Rage	A	Style Gilling	Inspection Zone
6-3-24	Bater Pouge	LA	Dot tirmin	



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

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Vessel Name: KIRBY 11516

Inspection 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 OCMI Houston-Galveston, TX.

---Hull Exams---

 Exam Type
 Next Exam
 Last Exam
 Prior Exam

 DryDock
 01May2025
 01May2015
 08Aug2005

 Internal Structure
 30Jun2025
 12Jun2020
 01May2015

--- 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

11040 Barrels A 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 C/L	645	15.90
2 C/L	608	15.90
3 C/L	608	15.90

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
1	1394	8ft 9in	13.60	R, LBS
I	1502	9ft 3in	13.60	R, LBS
III	1592	9ft 8in	15.90	R, LBS
III	1700	10ft 2in	13.60	R, LBS
III	1773	10ft 6in	8.70	R, LBS

Conditions Of Carriage

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial C1-1404455, dated 09DEC14 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.

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.

Cargo tanks must be loaded uniformly whenever a 46 CFR Subchapter "O" cargo is carried; for trim purposes, the weight of cargo in each tank may exceed the uniformly loaded tank cargo weight by at most 5 percent.

The maximum density of cargo which may be filled to the tank top is 8.745 lbs/gal. Cargoes with higher densities, up to 15.85

^{*}Stability and Trim*



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

Certification Date: 23 Jun 2020 Expiration Date: 23 Jun 2025

Certificate of Inspection

Vessel Name: KIRBY 11516

lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

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 C2-0504579 dated 31MAY2005 and the list of authorized cargoes on the CAA, Serial C1-1404455 dated 09DEC14 and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

--- Inspection Status ---

Cargo Tanks

	Internal Exam		External Exan	n	
Tank Id	Previous Last	Next	Previous	Last	Next
1 C/L	15Mar2013 01May2015	01May2025	= " " " " " " " " " " " " " " " " " " "	L .	-
2 C/L	15Mar2013 01May2015	01May2025	=	-	= "
3 C/L	15Mar2013 01May2015	01May2025		_	-
4 ,		Hydro Test			
Tank Id	Safety Valves	Previous	Last	Next	
1 C/L	. .	-		<u>-</u>	
2 C/L		= " "	-		
3 C/L		,	-	- 1	

--- 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

B-II

END



C1-1404455

Dated: 09-Dec-14



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Shipyard: JEFFBOAT

Hull #: 04-2258

Tank Group Information	Cargo Id	dentificati	on		Cargo		Tanks	ks Cargo Environmental Transfer Control								011		Orastast		Onesteel		O t t		011		Osselval		Control		Control		Control		Control		Onesteel		Onesteel								Onesteel		Osselval						Special Require	ments		
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Sea	_	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec	Temp																																								
A #1C, #2C, #3C	15.9	Atmos.	Elev	1	1ii 2ii	Integral Gravity	PV	Closed	1	G-1	NR	NA	Portable	40-1(f)(1), .50-5, .50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50-	55-1(b), (c), (e), (f), (h), (j), 56-1(a), (b), (c), (d), (e), (f), (g),	NR	Yes																																								

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.

List of Authorized Cargoes

Cargo Identificatio	Conditions of Carriage									
	Chem	Compat	Sub		Hull	Tank	Vapor Re App'd	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
Authorized Subchapter O Cargoes										
Acetone cyanohydrin	ACY	0 1,2	0	Е	E.	Α	Yes	3	.50-5, .50-70(b), .50-73, .50-81	G
Acetonitrile	ATN	37	0	C	- 111	Α	Yes	3	No	G
Acrylonitrile	ACN	15 ²	0	C	П	Α	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	ADN	37	0	Е	П	Α	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	111	Α	No	N/A	.50-81, .50-86	G
Allyl alcohol	ALA	15 ²	0	С	. 1	Α .	Yes	3	.50-5, .50-73	G
Allyl chloride	ALC	15	0	В	1	Α	Yes	3	.50-5	G
Aminoethylethanolamine	AEE	8	0	Е	III.	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	Ш	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G
Aniline	ANL	9	0	Е	J.	Α	Yes	3	.50-5, .50-73	G
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	11	Α	No	N/A	No	G
Benzene	BNZ	32	0	C	111	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 2	0	С	Ш	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 2	0	С	Ш	, A	Yes	1	.50-60, .56-1(b), (d), (f), (g)	G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	Ш	Α	Yes	1	.50-60	G [.]
Butyl acrylate (all isomers)	BAR	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	BMH	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	III	Α	Yes	1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	- II	Α	No	N/A	No	G
Carbolic oil	СВС	21	0	E	1	Α	Yes	3	.50-5, .50-73	G
Carbon tetrachloride	CBT	36	0	NA	111	Α	No	N/A	No	G
Caustic potash solution	CPS	5 2	0	NA	Ш	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	Е	Ш	Α	No	N/A	.50-73	G
Chlorobenzene	CRB	36	0	D	Ш	Α	Yes	1	No	G
Chloroform	CRF	36	0	NA	Ш	Α	Yes	3	No	G
Chlorohydrins (crude)	CHE	17	0	D	I	Α	Yes	3	.50-5	G
o-Chloronitrobenzene	CNC	42	0	E	1	Α	No	N/A		G
Coal tar crude bases	СТВ	9	0	D	1	Α	No	N/A	· ·	G
Coal tar naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	.50-73	G
Coal tar pitch (molten)	CTP	33	0	E	Ш	Α	No	N/A	.50-73	G

^{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.

Serial #:

C1-1404455

d: 09-Dec-14



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Page 2 of 8

Shipyard: JEFFBOAT

Cargo Identificatio	n		10		H	Conditions of Carriage						
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Re App'd (Y or N)	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp Peri		
Creosote	CCW	21 2	0	E	III	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	Ш	Α	No	N/A	.50-73, .55-1(b)	G		
Cresylic acid tar	CRX	21	0	Е	111	Α	Yes	1	.55-1(f)	G		
Crotonaldehyde	СТА	19 2	0	С	П	Α	Yes	4	.55-1(h)	G		
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	-111	Α	Yes	1	No	G		
Cyclohexanone	CCH	18	0	D	Ш	Α	Yes	1	.56-1(a), (b)	G		
Cyclohexanone, Cyclohexanol mixture	CYX	18 2	0	Е	Ш	Α	Yes	1	.56-1 (b)	G		
Cyclohexylamine	CHA	7	0	D	Ш	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	Е	Ш	Α	Yes	3	.56-1(a), (b)	G		
1,1-Dichloroethane	DCH	36	0	С	Ш	Α	Yes	1	No	G		
2.2'-Dichloroethyl ether	DEE	41	0	D	П	Α	Yes	1	.55-1(f)	G		
Dichloromethane	DCM	1 36	0	NA	III	A	. No	N/A	No	G		
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	E	III	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,2		Α	411	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	E	III	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
,1-Dichloropropane	DPB	36	0	C	III	Α	Yes	3	No	G		
1,2-Dichloropropane	DPP	36	0	C	III	Α	Yes	3	No	G		
1,3-Dichloropropane	DPC		0	С	111	Α	Yes	3	No	G		
1,3-Dichloropropene	DPU	15	0	D	11	A	Yes	4	No	G		
Dichloropropene, Dichloropropane mixtures	DMX		0	С	 II	A	Yes	1	No	G		
Diethanolamine	DEA		0	E	111	A	Yes	1	.55-1(c)	G		
Diethylamine	DEN		0	C	 III	A	Yes	3	.55-1(c)	G		
·	DET	7 2	0	E		A	Yes	1	.55-1(c)	G		
Diethylenetriamine	DBU		0	D	111	A	Yes	3	.55-1(c)	G		
Diisobutylamine	DIP	8	0	E	III	A	Yes	1	.55-1(c)	-		
Diisopropanolamine			0	C				3	.55-1(c)	G		
Diisopropylamine	DIA	7			- 11	A	Yes		.56-1(b)	G		
1,11-Diffictifylacetafflide	DAC		0	E	III	A	Yes	3	.56-1(b), (c)	. 0		
Dimethylethanolamine	DMB		0	D	111	A	Yes	1	.55-1(e)	G		
Dimethylformamide	DMF		0	D	111	A	Yes	1		9		
Di-n-propylamine	DNA		0	C		A	Yes	3	.55-1(c)	0		
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT		0	E	111	A	No	N/A	.56-1(b)			
Dodecyl diphenyl ether disulfonate solution	DOS		0	#	11 -	Α	No	N/A	No	.G		
EE Glycol Ether Mixture	EEG		0	D	III	A	No	N/A	No	G		
Epichlorohydrin	EPC		0	D	I	Α	Yes	3	.50-5	G		
Ethanolamine	MEA		0	E	111	A	Yes	1	.55-1(c)			
Ethyl acrylate	EAC		0	С	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	0		
Ethylamine solution (72% or less)	EAN		. 0	Α	- 11	Α	Yes	6	.55-1(b)	0		
N-Ethylbutylamine	EBA		0	D	111	Α	Yes	3	.55-1(b)			
N-Ethylcyclohexylamine	ECC		0	D	Ш	Α	Yes	1 .	.55-1(b)	G		
Ethylene chlorohydrin	ECH		0	D	1	Α	Yes	3	.50-5, .50-73	G		
Ethylene cyanohydrin	ETC		0	E	Ш	Α	Yes	1	No	G		
Ethylenediamine	EDA		0	D	Ш	Α	Yes	1	.55-1(c)	G		
Ethylene dichloride	EDC		0	С	Ш	Α	Yes	1	No	G		
Ethylene glycol hexyl ether	EGH	40	0	E	III	Α	No	N/A	No	(



Serial #: *C1-1404455*Dated: *09-Dec-14*

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Page 3 of 8

Shipyard: JEFFBOAT

Cargo Identification				* * *	117	Conditions of Carriage						
				2.			Vapor R	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		
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	III	Α	Yes	1	No	G		
Ethylene glycol propyl ether	EGP	40	0	E	Ш	Α	Yes	1	No	G		
2-Ethylhexyl acrylate	EAI	14	0	E	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Ethyl methacrylate	ETM	14	0	D/E	III	Α	Yes	2	.50-70(a)	G		
2-Ethyl-3-propylacrolein	EPA	19 2	0	E	- 111	Α	Yes	1	No	G		
Formaldehyde solution (37% to 50%)	FMS	19 ²	0	D/E	Ш	Α	Yes	1	.55-1(h)	G		
Furfural	FFA	19	0	D	. III.	Α	Yes	1	.55-1(h)	G		
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	Ш	Α	No	N/A	No	G		
Hexamethylenediamine solution	НМС	7	0	Е	Ш	Α	Yes	. 1	.55-1(c)	G		
Hexamethyleneimine	НМІ	7	0	С	11	Α	Yes	1	.56-1(b), (c)	G		
Hydrocarbon 5-9	HFN		0	С	Ш	Α	Yes	1	.50-70(a), .50-81(a), (b)	G		
2-Hydroxyethyl acrylate	HAI	0 1,2	0	Е	1	Α	Yes	3	.50-5, .50-70(a), .50-73, .50-81(a), (G		
Isoprene	IPR	30	Q	Α	Ш	Α	No	N/A	.50-70(a), .50-81(a), (b)	G		
Isoprene, Pentadiene mixture	IPN	8	0	В	III	Α	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	Ш	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G		
Mesityl oxide	MSO	18 ²	0	D	Ш	Α	Yes	1	No	G		
Methyl acrylate	MAM	14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	No	G		
Methyl diethanolamine	MDE	8	0	Е	111	Α	· Yes	1	.56-1(b), (c)	G		
2-Methyl-5-ethylpyridine	MEP	9	0	Е	111	Α	Yes	1	.55-1(e)	G		
Methyl methacrylate	MMN	1 14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
2-Methylpyridine	MPR	9	0	D	111	Α	Yes	3	.55-1(c)	G		
alpha-Methylstyrene	MSR	30	0 .	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Morpholine	MPL	7 2	0	D	111	Α	Yes	1	.55-1(c)	G		
Naphthalene (molten)	NTM	32	0	С	111	Α	Yes	1	No	G		
Nitrobenzene	NTB	42	0	Е	1	Α	Yes	3	.50-5, .50-73	G		
Nitroethane	NTE	42	0	D		Α	No	N/A	.50-81, .56-1(b)	G		
1- or 2-Nitropropane	NPM		0	D	111	Α	Yes	1	.50-81	G		
o-Nitrotoluene	NIE	42	0	E	1	Α	No	N/A	.50-5, .50-73	G		
Pentachloroethane	PCE	36	0	NA	111	Α	No	N/A		G		
1,3-Pentadiene	PDE	30	0	Α	Ш	Α	Yes	7	.50-70(a), .50-81	G		
Perchloroethylene	PER	36	0	NA	III	Α	No	N/A	No	G		
Phthalic anhydride (molten)	PAN	- 11	0	E	III	Α	Yes	.1	No	G		
Polyethylene polyamines	PEB	7 2	0	E	111	Α.	Yes		.55-1(e)	G		
iso-Propanolamine	MPA		0	E	III	A	Yes		.55-1(c)	G		
Propanolamine (iso-, n-)	PAX	8	0	E	III	Α	Yes	1	.56-1(b), (c)	G		
	IPP	7	0	A	11	A	No	N/A		G		
iso-Propylamine	PRD	9	0	C	111	A	Yes		.55-1(e)	G		
Pyrolycis Casolina	GPY		0		 	A	Yes		.50-5, .50-60	G		
Pyrolysis Gasoline Sodium acetate, Glycol, Water mixture (3% or more Sodium	SAP	5	0	,	111	A	No	N/A	.50-73, .55-1(j)	G		
Hydroxide)				NΙΛ						G		
Sodium aluminate solution (45% or less)	SAU	5	0	NA	- 111	Α	No	N/A		G		
Sodium chlorate solution (50% or less)	SDD			NA		A	No	N/A		G		
Sodium hypochlorite solution (20% or less)	SHQ		0	NA	- 111	A	No	N/A	.50-73, .55-1(a), (b)	G		
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less) Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but	SSH	0 1,2		NA NA	. 111	A A	Yes No	· 1		G		
less than 200 ppm) 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		

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

09-Dec-14



Vessel Name: KIRBY 11516

Official #: 1170771

Certificate of Inspection

Cargo Authority Attachment

Page 4 of 8

Shipyard: JEFFBOAT

Cargo Identification	I				×	Conditions of Carriage					
						Vapor Recovery					
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp	
Styrene (crude)	STX	30	0	D .	III	Α	Yes	2	No	G	
Styrene monomer	STY	30	0	D,	- 111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	111	Α	No	N/A	No	G	
Tetraethylenepentamine	TTP	7	0	Е	Ш	Α	Yes	1	.55-1(c)	G	
Tetrahydrofuran	THF	41	0	С	III	Α	Yes	1	.50-70(b)	G	
Toluenediamine	TDA	9	0	Е	П	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G	
o-Toluidine	TLI	9	0	E	11	Α	Yes	3	.50-5, .50-73	G	
1,2,4-Trichlorobenzene	ТСВ	36	0	Е	Ш	Α	Yes	1	No	G	
1,1,2-Trichloroethane	TCM	36	0	NA	Ш	Α	Yes	. 1	.50-73, .56-1(a)	G	
Trichloroethylene	TCL	36 ²	Ó	NA	III	Α	Yes	1	No	G	
1,2,3-Trichloropropane	TCN	36	0	Е	П	Α	Yes	3	.50-73, .56-1(a)	G	
Triethanolamine	TEA	8 2	. 0	Е	111	Α	Yes	1	.55-1(b)	G	
Triethylamine	TEN	7	0	С	. 11	Α	Yes	3	.55-1(e)	G	
Triethylenetetramine	TET	7 2	0	E	Ш	Α	Yes	1	.55-1(b)	G	
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	Ш	Α	- No	N/A	.56-1(a), (b), (c)	G	
Trisodium phosphate solution	TSP	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (c).	G	
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	Ш	Α	No	N/A	.56-1(b)	G	
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA	111	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G	
Vinyl acetate	VAM	13	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Vinyl neodecanate	VND	13	0	Е	- 111	· A	No	N/A	.50-70(a), .50-81(a), (b)	G	
Vinyltoluene	VNT	13	0	D	111	A	Yes	2.	.50-70(a), .50-81, .56-1(a), (b), (c), (G	
Acetonhenone ,	ACP	18 ²	D D	C F		A	Yes	1			
Acetophenone	ACP	18	D	Е		Α	Yes	1 .			
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E	-	A	Yes	1			
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		Α	Yes	1		22	
Amyl acetate (all isomers)	AEC	34	D	D		Α	Yes	1			
Amyl atcohol (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	e a se		
							Yes	1			
Butyl alcohol (iso-)	IAL	20 2	D	D		Α	163				
	IAL	20 ²	D D	D D		A	Yes	1			
Butyl alcohol (n-) Butyl alcohol (sec-)	BAN	20 2	D	D		Α	Yes	1	* 7 8		
Butyl alcohol (n-)	BAN BAS	20 ² 20 ²	D D	D C		A	Yes Yes	1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-)	BAN BAS BAT	20 ² 20 ² 20 ²	D D	D C		A A A	Yes Yes Yes	1 1 1			
Butyl alcohol (tert-) Butyl benzyl phthalate	BAN BAS BAT BPH	20 ² 20 ² 20 ² 34	D D D	D C C		A A A	Yes Yes Yes	1 1 1 1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene	BAN BAS BAT BPH BUE	20 ² 20 ² 20 ² 34 32	D D D D	D C C E D		A A A	Yes Yes Yes Yes Yes	1 1 1 1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions	BAN BAS BAT BPH BUE CLS	20 ² 20 ² 20 ² 34 32 22	D D D D D	D C C E D E		A A A A	Yes Yes Yes Yes Yes Yes Yes	1 1 1 1 1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions Cyclohexane	BAN BAS BAT BPH BUE CLS CHX	20 ² 20 ² 20 ² 34 32 22 31	D D D D D D D	D C C E D E C		A A A A A	Yes Yes Yes Yes Yes Yes Yes Yes Yes	1 1 1 1 1 1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions Cyclohexane Cyclohexanol	BAN BAS BAT BPH BUE CLS CHX	20 ² 20 ² 20 ² 34 32 22 31 20	D D D D D D D D D	D C C E D E C E		A A A A A A	Yes	1 1 1 1 1 1 1			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions Cyclohexane Cyclohexanol 1,3-Cyclopentadiene dimer (molten)	BAN BAS BAT BPH BUE CLS CHX CHN	20 ² 20 ² 20 ² 34 32 22 31 20 30	D D D D D D D D D D D D D D D D D D D	D C C E D E C E D/E		A A A A A A A	Yes	1 1 1 1 1 1 1 1 1 2			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions Cyclohexane Cyclohexanol 1,3-Cyclopentadiene dimer (molten) p-Cymene	BAN BAS BAT BPH BUE CLS CHX CHN CPD	20 ² 20 ² 20 ² 34 32 22 31 20 30 32	D D D D D D D D D D D D D D D D D D D	D C C E D C E D D E D D D		A A A A A A	Yes	1 1 1 1 1 1 1 1 2			
Butyl alcohol (n-) Butyl alcohol (sec-) Butyl alcohol (tert-) Butyl benzyl phthalate Butyl toluene Caprolactam solutions Cyclohexane Cyclohexanol 1,3-Cyclopentadiene dimer (molten) p-Cymene iso-Decaldehyde	BAN BAS BAT BPH BUE CLS CHX CHN CPD CMP	20 ² 20 ² 20 ² 34 32 22 31 20 30 32	D D D D D D D D D D D D D D D D D D D	D C C E D E C D E D / E D / E D E D / E D E		A A A A A A A	Yes	1 1 1 1 1 1 1 1 2			



Serial #: C1-1404455

Dated: 09-Dec-14

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Page 5 of 8

Shipyard: JEFFBOAT

Cargo Identification	on						Conditions of Carriage					
		3						Recovery				
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		
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Α	Yes	1	5	3 9 =		
Diacetone alcohol	DAA	20 2	D ·	D ,		Α	Yes	1				
ortho-Dibutyl phthalate	DPA	34	D	Е		Α	Yes	1				
Diethylbenzene	DEB	32	D	D		Α	Yes	1	1			
Diethylene glycol	DEG	40 2	D	E		Α	Yes	1				
Diisobutylene	DBL	30	D	С		Α	Yes	1				
Diisobutyl ketone	DIK	18	D	D		Α	Yes	1				
Diisopropylbenzene (all isomers)	DIX	32	D	E		Α	Yes	1				
Dimethyl phthalate	DTL	34	D	E		Α	Yes	1				
Dioctyl phthalate	DOP	34	D	Е		Α	Yes	1	2			
Dipentene	DPN	30	D	D		Α	Yes	1				
Diphenyl	DIL	32	D	D/E		Α	Yes	1				
Diphenyl, Diphenyl ether mixtures	DDO	33	D	Е		Α	Yes	1	* * * * * * * * * * * * * * * * * * * *			
Diphenyl ether	DPE	41	D	{E}		Α ·	Yes	1				
Dipropylene glycol	DPG	40	. D	E		Α	Yes	1				
Distillates: Flashed feed stocks	DFF	33	D	E	16	A	Yes	1				
Distillates: Straight run	DSR	33	D	E		. A	Yes	1		-		
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1				
2-Ethoxyethyl acetate	EEA	34	D	D		Α	Yes	1				
Ethoxy triglycol (crude)	ETG	40	D,	Е		Α	Yes	1				
Ethyl acetate	ETA	34	D	С		Α	Yes	1				
Ethyl acetoacetate	EAA	34	· D	E		Α	Yes	1				
Ethyl alcohol	EAL	20 ²	D	C		Α	Yes	1				
Ethylbenzene	ETB	32	D	С		A	Yes	1				
Ethyl butanol	EBT	20	D	D		Α .	Yes	1				
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1				
Ethyl butyrate	EBR	34	D	D		Α	Yes	1				
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1				
Ethylene glycol	EGL	20 2	D	E		Α	Yes	1 .				
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1				
	EGY	34	D	E		Ä	Yes	1				
Ethylene glycol diacetate	EPE	40	D	E		A	Yes	1				
Ethylene glycol phenyl ether	EEP	34	D	D		A	Yes	1				
Ethyl-3-ethoxypropionate	EHX	20	D	E		A	Yes	1		3		
2-Ethylhexanol	EPR	34	D	С		A	Yes	1				
Ethyl propionate	ETE	32	D	D		A	Yes	1				
Ethyl toluene	FAM	10	D	E		A	Yes	1				
Formamide	FAL	20 2	D	E		A	Yes	1		-		
Furfuryl alcohol	GAK	33	D	A/C		A	Yes	1				
Gasoline blending stocks: Alkylates			D	A/C		A	Yes	1				
Gasoline blending stocks: Reformates	GRF GAT	33	D	C		A	Yes	1				
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)										4		
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		A	Yes	1				
Gasolines: Straight run	GSR	33	D	A/C	22	Α	Yes	1	3			
Glycerine	GCR	20 2	D	Е	1	, A	Yes	1				
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1	8 8			

Certifica

Serial #: C1-1404455

Dated: 09-Dec-14

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Page 6 of 8

Shipyard: JEFFBOAT

Cargo Identifi	ication		-1	ž.		Conditions of Carriage					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Heptanoic acid	HEP	4	D	Е		Α	Yes	1	<u> </u>		
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1			
Heptene (all isomers)	HPX	30 .	D	С		Α	Yes	2			
Heptyl acetate	HPE	34	D	Е		Α	Yes	1			
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 2	D	B/C		Α	Yes	1			
Hexanoic acid	HXO	4	D	E		Α	Yes	1			
Hexanol	HXN	20	D	D		Α	Yes	1			
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2	* 1		
Hexylene glycol	HXG	20	D	E		Α	Yes	1			
Isophorone	IPH	18 ²	D	Е		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	1			
Kerosene	KRS	33	D	D		Α	Yes	1	9 0		
Methyl acetate	MTT	34	D	D	(4)	A	Yes	1			
Methyl alcohol	MAL	20 2	D	С		Α	Yes	1			
Methylamyl acetate	MAC	34	D	D		A	Yes	1		- w - e	
Methylamyl alcohol	MAA	20	D	D		Α	Yes	1		-	
Methyl amyl ketone	MAK	18	D	D		A	Yes	1			
Methyl tert-butyl ether	MBE	41 2	D	C		A	Yes	1			
Methyl butyl ketone	MBK	18	D	С		A	Yes	1			
	MBU	34	D	С		A	Yes	1			
Methyl chyl ketone	MEK	18 ²	D	C		A	Yes	1			
Methyl bentyl ketone	MHK	18	D	D		A	Yes	1			
Methyl heptyl ketone	MIK	18 2	D	С		A	Yes	1			
Methyl isobutyl ketone				E		A		1		9	
Methyl naphthalene (molten)	MNA	32	D				Yes			-	
Mineral spirits	MNS	33	D	D		A	Yes	1			
Myrcene	MRE	30	D	D		A	Yes	1			
Naphtha: Heavy	NAG	33	. D	#		Α	Yes	1			
Naphtha: Petroleum	PTN	33	D	#		A	Yes	1			
Naphtha: Solvent	NSV	33	D	D		A	Yes	1	(8)		
Naphtha: Stoddard solvent	NSS	33	D	D		A	Yes	1			
Naphtha: Varnish makers and painters (75%)	NVM	33	D	C		A	Yes	1			
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes	1			
Nonene (all isomers)	NON	30	D	D		Α	Yes	2			
Nonyl alcohol (all isomers)	NNS	20 2	D	E		Α	Yes	1	8 8 8		
Nonyl phenol	NNP	21	D	Е		Α	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		Α	Yes	1	* * * * * * * * * * * * * * * * * * * *		
Octanoic acid (all isomers)	OAY	4	D	E		Α	Yes	1	9 49		
Octanol (all isomers)	OCX		D	E		Α	Yes	1			
Octene (all isomers)	OTX	30	D	С		Α	Yes	2			
Oil, fuel: No. 2	OTW		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	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			



Serial #: C1-1404455

Dated: 09-Dec-14

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 11516

Official #: 1170771

Page 7 of 8

Shipyard: JEFFBOAT

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	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. Perio
Oil, misc: Gas, high pour	OGP	33	D	Е	,	Α	Yes	1		
Oil, misc: Lubricating	OLB	33	D	E		Α	Yes	1_		
Oil, misc: Residual	ORL	33	D	E		Α	Yes	1		
Oil, misc: Turbine	ОТВ	33	D	E		Α '	Yes	1		
n-Pentyl propionate	PPE	34	D	D		A	Yes	1		
alpha-Pinene	PIO	30	D	D		Α	Yes	1		
beta-Pinene .	PIP	30	D	D		Α	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	Е		Α	Yes	1	1, 2	
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	E		Α	Yes	1		
Polybutene	PLB	30	D	E	0	Α	Yes	1		
Polypropylene glycol	PGC	40	D	Е		A	Yes	1		
iso-Propyl acetate	IAC	34	D	С		Α	Yes	1		
n-Propyl acetate	PAT	34	D	С		Α	Yes	1		
iso-Propyl alcohol	IPA	20 2	D	С		Α	Yes	1	g	
n-Propyl alcohol	PAL	20 2	D	С		Α	Yes	1.		
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1		
iso-Propylcyclohexane	IPX	31	D	D		Α	Yes	1		
Propylene glycol	PPG	20 2	D	Е		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	Е	725	Α	Yes	1		
Tetraethylene glycol	TTG	40	D	E		Α	Yes	1		
Tetrahydronaphthalene	THN	32	D	E		. A	Yes	1		
Toluene	TOL	32	D	С		Α	Yes	1		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Е		Α	Yes	. 1		4
Triethylbenzene	TEB	32	D	E		Α	Yes	1		
Triethylene glycol	TEG	40	D ·	Е		Α	Yes	1		
Triethyl phosphate	TPS	34	D	Е		Α	Yes	1		
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1		
Trixylenyl phosphate	TRP	34	D ,	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		



Cargo Authority Attachment

Page 8 of 8

Certificate of Inspection

Serial #: C1-1404455 Dated:

09-Dec-14

Shipyard: JEFFBOAT

Hull #: 04-2258

Official #: 1170771

Explanation of terms & symbols used in the Table:

Cargo Identification

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.

Chem Code 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

Subchapter O Note 3

A. B. C Note 4

Hull Type

NA

Vessel Name: KIRBY 11516

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

Note 2

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

Subchapter The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified. Subchapter D

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. 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

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.

NA

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.

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

Approved (Y or N)

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

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 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. Vapor Recovery

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. Approved (Y or N) 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 fouling safety componenets and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine

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

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

requirement is in addition to the requirements of Category 1.

Category 6 (High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5. Category 7 (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5.

none The cargo has not been evaluated/classified for use in vapor control systems