

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

Certification Date: 10 Aug 2023 Expiration Date: 10 Aug 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 Ce	rtificate of Inspection receipt on board	is issued under the pro I said vessel of the orig	ovision of Title 46 Unit inal certificate of insp	ted States Code, pection, this certification	Section 399, in lieu of cate in no case to be	the regular certificate of the valid after one year from	of inspection, and sho n the date of inspecti	all be in force only u	intil the
Vessel Name		Of	ficial Number	IMO	Number	Call Sign	Service		
KIRBY 28089	)	13	246170				Tank E	Barge	
Hailing Port									
-			Hull Material		Horsepower	Propulsion			
GIBSON, LA			Steel						
UNITED STA	ATES								
Place Built			Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length	
GALVESTO	N, TX		04 lum0040	1200020	R-1619	R-1619		R-297.5	
LINUTED OTA	TEO		21Jun2013	12Dec201	Z  -	I-		1-0	
UNITED STA	ATES								
Owner KIRBY INLAN	ID MARINE I	Ð			perator irby Inland Ma	rina I P			
55 WAUGH		-1			8350 MARKE				
HOUSTON, 1					HANNELVIE\				
UNITED STA	TES			U	NITED STAT	ES			
		-1241- 41 <b>f</b> - 11-			D	ما اسماريما اس	ubiah thara m	unt bo	
						el. Included in v DSS Operators		iust be	
0 Masters		0 Licensed Mate	s 0 Chief	Engineers	0	Oilers			
0 Chief Mates	6	0 First Class Pilo	ots 0 First /	Assistant Eng	ineers				
0 Second Ma	tes	0 Radio Officers	0 Secon	nd Assistant E	Engineers				
0 Third Mates	5	0 Able Seamen	0 Third	Assistant Eng	gineers				
0 Master Firs	t Class Pilot	0 Ordinary Seam	nen 0 Licen:	sed Engineers	S.		•		
0 Mate First 0		0 Deckhands		fied Member E					<del></del>
In addition, thi Persons allow	•	carry 0 Passer	ngers, 0 Othei	r Persons ir	n crew, 0 Pers	ons in addition	to crew, and	no Others. T	otal
Route Perm	itted And Co	nditions Of O	peration:						
Lakes,	Bays, and	Sounds							
Also, in fai Florida.	r weather or	nly, not more	than twelve	(12) mile	es from shore	e between St.	Marks and C	arrabelle,	
This vessel	has been gra	anted a fresh	water servi - than 6 mon	ce examina	ation interva 7 12 month be	al per 46 CFR eriod, the ves	31.10-21(a) ssel must be	(2). If the inspected	is usina
salt water i	ntervals per	46 CFR 31.1	0-21(a)(1) a	nd the cog	gnizant OCMI	notified in v	vriting as s	oon as this	
This tank ba	rge is part:	cipating in	the Eighth C	oast Guard	d District's	Tank Barge St	reamlined I	nspection P	rogram
		R ADDITION					<u> </u>		
With this Inspe	ection for Cer	tification having	been comple	eted at Port	Arthur, TX, U	NITED STATE	S, the Office	r in Charge, I	Marine
Inspection, Ma	arine Safety L	Jnit Port Arthur	certified the v	∕essel, in all	respects, is ir	n conformity wit	th the applica	bie vessel ins	spection
iaws and the f		<u>llations prescrit</u> riodic/Re-Inspe		71.	This cortifica	ate issued by	2/5/	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>	
D-1-	,			uro.		. INAGAKI, GS	12 hours	Dy direction	
Date	Zone	A/P/R	Signatu	ire	B. I	. INAGAKI, GS	2-13, USCG,	by an ection	

Officer in Charge, Marine Inspection

Inspection Zone

Marine Safety Unit Port Arthur



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

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Vessel Name: KIRBY 28089

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

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

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

31Aug2033

10Aug2023

21Jun2013

Internal Structure

31Aug2028

10Aug2023

09May2018

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

Authorization:

FLAMMABLE/COMBUSTIBLE LIQUIDS AND SPECIFIED HAZARDOUS CARGOES Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

**Total Capacity** 

36620

Barrel

No

No

#### \*Hazardous Bulk Solids Authority\*

Not Authorized

#### \*Loading Constraints - Structural\*

Loading Constraints of the	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
Tank Number		13.5
1	735	13.5
2	741	
3	649 ·	13.5

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

*Loading Cons	traints - Stability			D. I. D winting
Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
11	4048	10ft 3in	13.5	
ıı ,	4048	10ft 3in	13.5	
111	4048	10ft 3in	13.5	
III	4048	10ft 3in	13.5	
<b>,</b>				

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial No. C1-1204976 dated 11 Dec 12, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

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

When the vessel is carrying cargoes containing 0.5% or greater benzene by volume, the person in charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C, are applied.

#### \*Vapor Control Authorization\*

Per 46 CFR, 39, excluding Part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by Marine Safety Center letter serial No. C1-1204976, dated 11 Dec 12, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

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



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The maximum design density of cargo which may be filled to the tank top is 8.54 lbs/gal. Cargoes with higher densities, up to 13.5 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

#### --- Inspection Status ---

#### \*Cargo Tanks\*

		Internal Exam			External Exam		
-	Tank Id	Previous	Last	Next	Previous	Last	Next
	1	21Jun2013	10Aug2023	21Aug2033	-	-	-
	2	21Jun2013	10'Aug2023	31Aug2033	-	-	-
	3	21Jun2013	10Aug2023	31Aug2033	-	-	-
				Hydro Test			
	Tank Id	Safety Valves		Previous	Last	Next	
	1	-		-	-	-	
	2	-		-	-	-	
	3	_		-	-	-	

#### ---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

\_

B-II

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



## Certificate of Inspection

Cargo Authority Attachment

Vessel Name: SMI 30045 Official #: 1246170

Shipyard: Kennedy Construction

Dated:

C1-1204976

11-Dec-12

Hull #: H123

46 CFR 151 Tank	Group (	Chara	ctorie	fice											11120		-
Tank Group Information		dentificat			Cargo	Tanks Cargo Environmental Transfer Control Fi				Special Requirements			T	T			
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Sea	Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1P/S, #2P/S, #3P/S	13,5	Almos.	Amb.	11	1li 2li	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50- 81(b),	55-1(b), (c), (e), (f), (j), 56-1(a), (b), (c), (d), (e), (f), (g),	NR	No

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

2. Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.

3. Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

Cargo Identification			Condi	itions of Carrlage	******					
		ļ					Vapor R			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	(X or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Authorized Subchapter O Cargoes										***
Acetonitrile	ATN	37	0	С	111	A	Yes	3	No	G
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	- 11	A	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	ADN	37	0	E	11	A	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	[]]	Α.	No	N/A	.50-81, .50-86	G
Aminoethylethanolamine	AEE	8	0	E	111	Α	Yes	1	.55-1(b)	
Ammonium bisuifite solution (70% or less)	ABX	43 2	0	NA	111	A	No	, N/A	.50-73, .56-1(a), (b), (c)	G
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	111	A	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	A	Yes	1	.50-60	- <del>- G</del>
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 <sup>2</sup>	0	C	111	A	Yes	<u> </u>	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 ²	0	C	III	A	Yes	1	.50-60, .56-1(b), (d), {f), (g}	G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	втх	32	0	B/C	111	Α	Yes	1	.50-60	G
Butyl acrylate (all isomers)	BAR	14	0	D	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	ВМН	14	0	D	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	c	111	A	Yes	<u>-</u> 1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	EJ.	A	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	III	A	No	N/A	No	
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	111	- <u>``</u>	No	N/A	.50-73, .55-10)	
Caustic soda solution '	CSS	5 <sup>2</sup>	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	<del>'''</del> -	A .	Yes	1	No	
Chloroform	CRF	36	0	NA.	111	A	Yes	3	No	
Coal tar naphtha solvent	NCT	33	0	D	111	A	Yes	1	.50-73	
Creosote	CCW	21 2	0	E	 	~- <del>^</del>	Yes	1	No	
Cresols (all isomers)	CRS	21	0		<u>'''</u>	A	Yes	1	No	- G
Cresylate spent caustic	CSC	5	0	NA	111		No	N/A	.50-73, .55-1(b)	G
Cresylic acid tar	CRX	•	Ö	E	111	A	Yes	1	.55-1(f)	G
Crotonaldehyde	CTA	19 2	0	C	li .	- <u>A</u>	Yes	4	55-1 (h)	
Crude hydrocarbon feedstock (containing Butyraidehydes and Ethylpropyl acrolein)	CHG		0	C	III	A	No	N/A	No	G
Cyclohexanone	CCH	18	0	D	III	A	Yes	1	.56-1(a), (b)	G
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	0	E	111	A	Yes	1	.56-1 (b)	G
Cyclohexylamine	CHA	7	0	D	111	A	Yes	1	.58-1(a), (b), (c), (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

Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy Construction

Cargo Identificati							1108 17 - 11123							
Cargo identificati	on		1		7		Conditions of Carriage							
Name	Chem	Compat	Sub		Hull	Tank	Vapor Re App'd	ocovery VCS	Special Requirements in 46 CFR					
Cyclopentadiene, Styrene, Benzene mixture	Code CSB	Group Na 30	Chanter O	Grade D	i Tvoe l	Group A	(Y or N)	Category	151 General and Mattis of .50-60, .56-1(b)	Insp. Perior				
iso-Decyl acrylate	IAI	14	o	E	111	A	Yes Yes	1 2	.50-70(a), .50-81(a), (b), .55-1(c)	G				
Dichlorobenzene (all isomers)	DBX	36	0	E	111	A	Yes	3	.56-1(a), (b)	- G				
1,1-Dichloroethane	DCH	36	0	c	[]]	<u>^</u>	Yes	1	No No	G				
2,2'-Dichloroethyl ether	DEE	41	0	D			Yes		.55-1(f)	G				
Dichloromethane	DCM	36	0	NA NA	111	A	No	1	No	G				
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	E	111	A	No	N/A	.56-1(a), (b), (c). (g)	G				
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,2	0	A	III		No	N/A N/A	56-1(a), (b), (c), (g)	G				
2,4-Dichtorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	Ε	111	Ā	No	N/A	.56-1(a), (b), (c), (g)	G				
1,1-Dichloropropane	DPB	36	0	C	111	A	Yes	3	No No	G				
1,2-Dichloropropane	DPP	36	0	c		A	Yes	3	No	G				
1,3-Dichloropropane	DPC	36	0	c	111	A	Yes		No	G				
1,3-Dichloropropene	DPU	15	o	D	11	A		3	No	G				
Dichloropropene, Dichloropropane mixtures	DMX	15	o	C	Ü		Yes	4	No No	G				
Diethanolamine	DEA	- 8	<del>-</del>	E	111	A	Yes			G				
Diethylamine	DEN	7	0				Yes	1	.55-1(c)	G				
Diethylenetriamine	DET	7 2	0	E		A	Yes	3	.55-1(c)	G				
Diisobutylamine	DBU	7	-0		111	<u>A</u>	Yes	1	.55-1(c)	G				
Dilsopropanolamine	DIP	8	-0	- E	111	A	Yes	3	.55-1(c)	G				
Dilsopropylarnine	DIA	7	-0	C		_ <u>A</u>	Yes		.55-1(c)	G				
N,N-Dimethylacetamide	DAC	10	0		11	_ <u>A</u>	Yes	3	.55-1(c)	G				
Dimethylethanolamine	DMB	8	<del>-0</del>	E	101	A	Yes	3	.56-1(b)	G				
Dimethylformamide	DMF	10	0	<u>D</u>	111	A	Yes	1	.56-1(b), (c)	G				
DI-n-propylamine	DNA	<del></del>	0	D	111	_ A	Yes	1	.55-1(e)	G				
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	<u>'</u>		<u>C</u>	11	<u> </u>	Yes	3	.55-1(e)	G				
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	E	III	<u> </u>	No	N/A	.56-1(b)	G				
EE Glycol Ether Mixture	EEG	40	0	#	1)	<u> </u>	No	N/A	No	G				
Ethanolamine	MEA	8	0	D	111	<u>A</u>	No	N/A	No	G				
Ethyl acrylate	EAC	14	0	<u>E</u>	111	<u>A</u>	Yes	1	.55-1(c)	G				
Ethylamine solution (72% or less)	EAN	7	0	C	111	A	Yes	2	.50-70(a), 50-81(a), (b)	G				
N-Ethylbutylamine	EBA	7		<u>A</u>	11	<u> </u>	No .	N/A	55-1(b)	G				
N-Ethylcyclohexylamine	ECC		0	D	111	A	Yes	3	.55-1(b)	G				
Ethylene cyanohydrin	ETC	7 20	0	D	IN	<u> </u>	Yes	1	.55-1(b)	G				
Ethylenediamine	EDA	7 <sup>2</sup>	0	E	[1]	A	Yes		No	G				
Ethylene dichloride	EDC	36 <sup>2</sup>		D	111	<u> </u>	Yes	1	.55-1{c}	G				
Ethylene glycol hexyl ether	EGH	40	0	<u>C</u>	III .	Α	Yes	1	No	G				
Ethylene glycol monoalkyl ethers	EGC		0	E	111	<u> </u>	No	N/A	No	G				
Ethylene glycol propyl ether	EGP	40		D/E	111	A	Yes	1	No	G				
2-Ethylhexyl acrylate		40		<u>E</u>	111	Α	Yes	1	No	G				
Ethyl methacrylate	EAI	14		E	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G				
2-Ethyl-3-propylacrolein	ETM	14		D/E	- 111	Α	Yes	2	.50-70(a)	G				
Formaldehyde solution (37% to 50%)	EPA	19 ²		E	111	Α	Yes	1	No	G				
Furfural	FMS			D/E	- []	<u>A</u>	Yes	1	.55-1 (h)	G				
Glutaraldehyde solution (50% or less)	FFA			D	III	A	Yes		.55-1(h)	G				
Hexamethylenediamine solution	GTA			NA .	Ш	Α	No	,. ,	No	G				
Hexamethyleneimine	HMC			E	III	Α	Yes	1	.55-1(a)	G				
fydrocarbon 6-9	HMI			C	H	A	Yes		.56-1 (b), (c)	G				
soprene	HFN	···			111	Α	Yes		.50-70(a), .50-81(a), (b)	G				
- SPIONO	IPR	30	0 ,	Α	111	Α	No	N/A	.50-70(a), .50-81(a), (b)	G				



Dated: 11-L

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy Construction

Kraft pulping liquors (free alkali content 3% or more) (Including: Black, Green, or White liquor)         KPL           Mesityl oxide         MSO         1           Methyl acrylate         MAM         1           Methyl cyclopentadiene dimer         MCK         30           Methyl diethanolamine         MEP         30           2-Methyl-5-ethylpyridine         MEP         30           Methyl methacrylate         MMM         10           2-Methylpyridine         MPR         30           alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	5 8 2 4 100 8 9 4 9 9 0 7 2 2 2 0 6 6 7 2	Sub Chapter O O O O O O O O O O O O O O	Grade B NA  D C C E E C D D D D D D D	Hull Tvoe 111 111 111 111 111 111 111 111 111 1	Tank Groun A A A A A A A A A A A	Vapor Re App'd	VCS Catenory N/A N/A 1 2 1 1 2 3 2 1 1	Special Requirements in 46 CFR 151 General and Mat'ls of .50-70(s) .55-1(c) .50-73 .56-1(a), (c), (g)  No .50-70(a) .50-81(a), (b)  No .50-1(b), (c) .55-1(e) .50-70(a) .50-81(a), (b) .55-1(c) .50-70(a) .50-81(a), (b) .55-1(c) .50-70(a) .50-81(a), (b) .55-1(c) .50-70(a) .50-81(a), (b)	Insp. Parind G
Isoprene, Pentadiene mixture Kraft pulping liquors (free alkali content 3% or more) (including: Black, KPL Green, or White liquor)  Mesityl oxide Methyl acrylate Methyl acrylate Methyl diethanolamine  2-Methyl-5-ethylpyridine Methyl methacrylate MMM 1- 2-Methyl methacrylate MMM 1- 2-Methylpyridine Methyl methacrylate MMM 1- 3-Methylpyridine Methyl methacrylate MMM 1- 1- or 2-Nitropropane Nitroethane Nitroethane Polyethylene Perchloroethylene Perchloroethylene Perchloroethylene Perchloroethylene Perchloroethylene Perchloroethylene Perchloroethylene Perchloroethylene PEB 7-	5 8 2 4 100 8 9 4 9 9 0 7 2 2 2 0 6 6 7 2	O O O O O O O O O O O O O O O O O O O	B NA  D C C E E D D D	Tvoe	A A A A A A A A A A A A A A A A A A A	Yes	N/A N/A  1 2 1 1 2 3 2 1	151 General and Mat'ls of .50-70(a), .55-1(c) .50-70(a), .55-1(a), (c), (g)   No .50-70(a), .50-81(a), (b)   No .56-1(b), (c) .55-1(c) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b) .50-70(a), .50-81(a), (b)	G G G G G G G G G G G G G G G G G G G
Mesityl oxide         MSO         1           Methyl acrylate         MAM         1           Methyl derylate         MCK         3           Methyl diethanolamine         MDE         3           2-Methyl-5-ethylpyridine         MEP         3           Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         3           alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	8 2 4 10 8 9 4 9 0 7 2 2 2 0 6 7 2	0 0 0 0 0 0 0 0 0	D C C E E C D D D D D	111 111 111 111 111 111 111 111	A A A A A A A	Yes	N/A  1 2 1 1 2 3 2 1	.50-7356-1(a), (c), (g)  No .50-70(a)50-81(a), (b)  No .56-1(b), (c) .55-1(e) .50-70(a)50-81(a), (b) .55-1(c) .50-70(a)50-81(a), (b)	G G G G G
Methyl acrylate         MAM         1.           Methyl cyclopentadiene dimer         MCK         3.           Methyl diethanolamine         MDE         3.           2-Methyl-5-ethylpyridine         MEP         3.           Methyl methacrylate         MMM         1.           2-Methylpyridine         MPR         3.           alpha-Methylstyrene         MSR         3.           Morpholine         MPL         3.           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	4 80 8 9 4 9 0 7 <sup>2</sup> 2 2 0 6 7 <sup>2</sup>	0 0 0 0 0 0 0 0	C C E E C D D D	111 111 111 111 111 111 111	A A A A A A	Yes	2 1 1 1 2 3 2	.50-70(a), .50-81(a), (b)  No .56-1(b), (c) .55-1(e) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G G G
Methylcyclopentadiene dimer         MCK         3           Methyl diethanolamine         MDE         2           2-Methyl-5-ethylpyridine         MEP         3           Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         3           alpha-Methylstyrene         MSR         30           Morpholine         MPL         30           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	9 9 0 7 2 2 2 0 6 7 2	0 0 0 0 0 0 0 0	C C E E C D D D	111 111 111 111 111 111 111	A A A A A A	Yes	2 1 1 1 2 3 2	.50-70(a), .50-81(a), (b)  No .56-1(b), (c) .55-1(e) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G G G
Methylcyclopentadiene dimer         MCK         3           Methyl diethanolamine         MDE         3           2-Methyl-5-ethylpyridine         MEP         3           Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         3           alpha-Methylstyrene         MSR         30           Morpholine         NTE         42           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	9 9 0 7 2 2 2 0 6 7 2	0 0 0 0 0 0 0 0	C E C D D D D	101 101 101 101 101 101 101	A A A A A	Yes Yes Yes Yes Yes Yes Yes Yes Yes	1 1 2 3 2	No .56-1(b), (c) .55-1(e) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G G G
2-Methyl-5-ethylpyridine         MEP           Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         3           alpha-Methylstyrene         MSR         30           Morpholine         MPL         1           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	9 4 9 0 7 <sup>2</sup> 2 2 2 0 6	0 0 0 0 0 0 0	E C D D	101 101 101 101 101	A A A A	Yes Yes Yes Yes Yes Yes Yes	1 1 2 3 2	.56-1(b), (c) .55-1(e) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G G
2-Methyl-5-ethylpyridine         MEP         9           Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         3           alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	9 4 9 0 7 <sup>2</sup> 2 2 2 0 6	0 0 0 0 0 0	E C D D	161 JTF 6JJ JUE DJI (E	A A A A	Yes Yes Yes Yes	1 2 3 2 1	.55-1(e) .50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G
Methyl methacrylate         MMM         14           2-Methylpyridine         MPR         6           alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	4 9 0 7 <sup>2</sup> 2 2 0 6 7 <sup>2</sup>	0 0 0 0 0 0	C D D D	10 61) 10 10 10 10 10	A A A	Yes Yes Yes Yes	2 3 2 1	.50-70(a), .50-81(a), (b) .55-1(c) .50-70(a), .50-81(a), (b)	G G
2-Methylpyridine         MPR         8           alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadlene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	9 0 7 <sup>2</sup> 2 2 2 0 6 7 <sup>2</sup>	0 0 0 0 0	D D D	111 111 111 11	A A	Yes Yes Yes	3 2 1	.55-1(c) .50-70(a), .50-81(a), (b)	G
alpha-Methylstyrene         MSR         30           Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	0 7 <sup>2</sup> 2 2 0 6 7 <sup>2</sup>	0 0 0 0	D D		A	Yes Yes	2	.50-70(a), .50-81(a), (b)	
Morpholine         MPL         7           Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	7 <sup>2</sup> 2 2 0 6 7 <sup>2</sup>	0 0 0	D D	1)   1	Α	Yes	1	· · · · · · · · · · · · · · · · · ·	G
Nitroethane         NTE         42           1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	2 2 0 6 7 <sup>2</sup>	0 0	D	11					
1- or 2-Nitropropane         NPM         42           1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	2 0 6 7 <sup>2</sup>	0			Α	Nο		.55-1(c)	G
1,3-Pentadiene         PDE         30           Perchloroethylene         PER         36           Polyethylene polyamines         PEB         7	0 6 7 <sup>2</sup>	0	ע				N/A	.50-81, .56-1(b)	G
Perchloroethylene PER 36 Polyethylene polyamines PEB 7	6 7 <sup>2</sup>			111	<u>A</u>	Yes	1	.50-81	G
Polyethylene polyamines PEB 7	7 <sup>2</sup>		A	111	A	No	N/A	.50-70(a), .50-81	G
loo Drassa (sulla			NA .	111	<u>A</u>	No	N/A	No	G
iso-Propanolamine MPA s	n.	0	E	181	A	Yes	1	.55-1(e)	G
Proposilemine flex - A		0	E	111	Α	Yes	1	.55-1(c)	G
lan Decade allow		0	E		A	Yes	11	.56-1(b), (c)	G
Duriding		0	A	!!	A	No	N/A	.55-1(a)	G
TRO 9		0	С	_111	A	Yes	1	.55-1(e)	G
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide) SAP Sodium aluminate solution (45% or less) SAU 5		0		i	Α	No	N/A	.50-73, ,55-1(j)	G
Cadium ablanda astati- (Car		0	NA	<b>111</b>	Α	No	N/A	.50-73, .56-1(a), (b), (c)	G
Codium humanitarity solution (cont		0	NA		A	No	N/A	.50-73	G
		0	NA	111	Α	No	N/A	.50-73, .56-1(a), (b)	G
		0	NA	[1]	A	Yes	1	.50-73, .55-1(b)	G
less than 200 ppm)	1,2	0	NA	Iff	Α	No	N/A	.50-73, .55-1(b)	G
	1,2	0	NA	II	Α	No	N/A	.50-73, .55-1(b)	
Styrene (crude) STX		0	D	111	Α	Yes	2	No	G
Styrene monomer STY 30	1 (	0	D	[[]	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	' 1	0	E	[]]	Α	Yes	1	.55-1(c)	G
Tetrahydrofuran THF 41		0	С	III	A	Yes	1	.50-70(b)	G
Toluenediamine TDA 9	- (	0	E	11	A	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G
1,2,4-Trichlorobenzene TCB 36	(		E	111	Α	Yes	1	No	G
1,1,2-Trichloroethane TCM 36	(	0	NA	III	Α	Yes	1	.50-73, .56-1(a)	G
Trichloroethylene TCL 36	2 (	0	NA	Ш	A	Yes	1	No	G
1,2,3-Trichloropropane TCN 36	(		E	II.	A	Yes	3	.50-73, 56-1(a)	
Triethanolamine TEA 8			 E	-: 	A	Yes	1	.55-1(b)	G
Triethylamine TEN 7			 C	<u> </u>	A	Yes	3	.55-1(e)	
Triethylenetetramine TET 7				101	A	Yes	1	.55-1(0)	G
Triphenylborane (10% or less), caustic soda solution TPB 5				111	A	No	N/A	.58-1(a), (b), (c)	
Trisodium phosphate solution TSP 5				III	A	No	•	.50-73, .56-1(a), (c).	G
Urea, Ammonium nitrate solution (containing more than 2% NH3) UAS 6				HI	A	No	N/A N/A	.56·1(b)	G.
Vanillin black liquor (free aikali content, 3% or more). VBL 5				III				.50-73, .56-1(a), (c), (g)	
/inyl acetate VAM 13				111 211	A A	No Vac	N/A		G
Vinyl neodecanate VND 13	c			(I)	A	Yes	2	.50-70(a), .50-81(a), (b) .50-70(a), .50-81(a), (b)	G
Vinyitoluene VNT 13				 	A A	No Yes		.50-70(a), .50-81, .56-1(a), (b), (c), (	G



Certificate of Inspection

### Cargo Authority Attachment

Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy Construction

Serial #: C1-1204976

11-Dec-12

Dated

Hull #: H123

Cargo Identification **Conditions of Carriage** Vapor Recovery Compat Sub Hull App'd VCS Special Requirements in 46 CFR (Y or N) Category 151 General and Mat'ls of Group No. Chapter Grade Insp. Period Subchapter D Cargoes Authorized for Vapor Control ACT 18<sup>2</sup> D C Α Yes Acetophenone ACF 18 D Ε Α Yes Alcohol(C12-C16) poly(1-6)ethoxylates APU 20 Đ Е Yes Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates AE8 Ε D Yes Amyl acetate (all isomers) AEC 34 D D A Yes Amyl alcohol (iso-, n-, sec-, primary) IAA 20 D n Α Yes BAL 21 D Е Α Yes 1 Brake fluid base mixtures (containing Poly(2-8)aikylene(C2-C3) **BFX** 20 D Ε Α glycols, Polyalkylene (C2-C10) glycol monoalkyl (C1-C4) ethers, and Yes their borate esters) Butyl acetate (all isomers) BAX 34 Ð D Α Yes Butyl aicohoi (iso-) IAL 20 2 D D Α Yes Butyl alcohol (n-) BAN 20 2 D D Α Yes Butyl alcohol (sec-) BAS 20 2 D С Α Yes Butyl alcohol (tert-) BAT D C Α Yes Butyl benzyl phthalate BPH D E Α Yes Butyl toluene BUE D D Α Yes Caprolactam solutions CLS D E Α Cyclohexane CHX 31 D C A Yes Cyclohexanol CHN 20 D Ε Α Yes 1,3-Cyclopentadiene dimer (moiten) CPD 30 D D/E Α Yes p-Cymene CMP 32 n D Α Yes iso-Decaldehyde IDA 19 D Е Α Yes n-Decaldehyde DAL 19 n Α Yes Decene DOF 30 D D Α Yes Decyl alcohol (all isomers) DAX 20 <sup>2</sup> D Ε Α n-Decylbenzene, see Alkyl(C9+)benzenes DBZ 32 D Ε Α Diacetone alcohol DAA 20 2 D D Α Yes ortho-Dibutyl phthalate DPA D F Α Yes Diethylbenzene DEB 32 D D Α Yes Diethylene glycol DEG 40 <sup>2</sup> D Е Α Yes Diisobutylene DBL 30 D C Yes Diisobutyl ketone DIK 18 D D Α Yes Dilsopropylbenzene (all isomers) DIX 32 D E Α Yes Dimethyl phthalate DTL 34 D E Α Yes Dioctyl phthalate DOF 34 D Ε Yes Α 1 Dipentene DPN 30 D D Α Yes Diphenyl DIL 32 Đ D/E Α Yes Diphenyl, Diphenyl ether mixtures DDO 33 D E Α Yes Diphenyl ether DPE 41 D {E} Α Yes Dipropylene glycol DPG 40 D Ε Α Yes Distillates: Flashed feed stocks DFF 33 D E Α Yes Distillates: Straight run DSR 33 D Е Α Yes Dodecene (all isomers) DOZ 30 D D Α Yes 1 2-Ethoxyethyl acetate 34 D D Yes 1 Ethoxy triglycol (crude) **ETG** 40 D Ε Α Yes 1 Ethyl acetate **ETA** 34 С Α Yes



Serial #: C1-1204976 Dated: 11-Dec-12

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy Construction

Cargo Identifica	tion					Conditions of Carriage						
-							Vapor	Recovery				
Name Ethyl acetoacetate	Chen I Code		Sub Chapt		Hult Type	Tank Groun	App'd	VCS	Special Requirements in 46 CFR	insp.		
Ethyl alcohol	EAA	34	D	E	TVDG	A	Yes	1	151 General and Mat'ls of	i Period		
Ethylbenzene	EAL	20 2	Ð	С		Α	Yes	1				
Ethyl butanol	ETB	32	D	С		Α	Yes	1				
Ethyl tert-butyl ether	EBT	20	D	D		Α	Yes	1				
	EBE	41	D	С		Α	Yes	1				
Ethyl butyrate Ethyl cyclohexane	EBR	34	D	D		Α	Yes	1				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ECY	31	D	D		Α	Yes	1				
Ethylene glycol	EGL	20 <sup>2</sup>	D	Е		Α	Yes	1	·			
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1				
Ethylene glycol diacetate	EGY	34	D	Ε		Α	Yes	1				
Ethylene glycol phenyl ether	EPE	40	D	E		Α	Yes	1				
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes	1		- <del></del>		
2-Ethylhexanol	EHX	20	D	E		Α	Yes	1	•			
Ethyl propionate	EPR	34	D	С		Α	Yes	1				
Ethyl toluene	ETE	32	D	D		A	Yes	1				
Formamide	FAM	10	D	E		A	Yes	1				
Furfuryl alcohol	FAL	20 ²	D	E			Yes	1		<del></del>		
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		A	Yes	1				
Gasoline blending stocks: Reformates	GRF	33	D	A/C		A	Yes	<u>'</u>				
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		A	Yes	1	, , , , , , , , , , , , , , , , , , , ,			
Gasofines: Aviation (containing not over 4.86 grams of lead per gaflon)	GAV	33	D	С		Α	Yes	1				
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1				
Gasolines: Polymer	GPL	33	D	A/C		A	Yes			<del></del>		
Gasolines: Straight run	GSR	33	D	A/C		A	Yes	<del>'</del>				
Glycerine	GCR	20 <sup>2</sup>	D	E		A	Yes	1		-		
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		A	Yes	1				
Heptanoic acid	HEP	4	D	E		A	Yes	1				
Heptanol (all isomers)	нтх	20	D	D/E			Yes	1		<del></del>		
Heptene (all isomers)	HPX	30		C		A	Yes	2		·		
Heptyl acetate	HPE	34	D	E		A			·			
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		A	Yes Yes	1				
fexanoic acid	HXO	4	D	E		A	Yes					
Hexanol	HXN	20	D	D		A		1				
lexene (all isomers)	HEX	30	D	C			Yes	1				
lexylene glycol	HXG	20	D	E		A	Yes	2				
sophorone	IPH	18 2	D	<u>-</u>		A	Yes					
let fuel; JP-4	JPF	33	D			A	Yes	1				
let fuel: JP-5 (kerosene, heavy)	JPV	33		E		<u>A</u>	Yes					
Kerosene	KRS	33	<u>D</u>	<u>D</u>		<u> </u>	Yes	1				
Methyl acetate	MTT		<u>D</u>	<u>D</u>		A	Yes					
fethyl alcohol	MAL	34 20 <sup>2</sup>	D	D		<u>A</u>	Yes	1				
Methylamyl acetate			D	C		<u>A</u>	Yes	1	VILLE			
fethylamyl alcohol	MAC	34	D	D		A	Yes	1				
lethyl amyl ketone	MAA	20	<u>D</u>	D		<u>A</u>	Yes	1				
lethyl tert-butyl ether	MAK	18		D		A	Yes	1				
lethyl butyl ketone	MBE	41 <sup>2</sup>		C		A	Yes	1				
lethyl butyrate	MBK	18		C		A	Yes	1				
y, 20-19-140	MBU	34	D	С		Α	Yes	1				



Dated: 11-Dec-12

# Certificate of Inspection

Cargo Authority Attachment

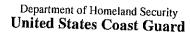
Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy Construction

Cargo Identific	cation					Conditions of Carriage						
			T			_		Recovery	dons of Carriage	<del></del>		
Name Methyl ethyl ketone	Chem Code MEK	Compat Group No 18 2			Huli Tvoe	Tank Groun A	App'd	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp.		
Methyl heptyl ketone	мнк	18	D	D		A	Yes	1				
Methyf Isobutyl ketone	MIK	18 <sup>2</sup>	D	C		A	Yes	<u>'</u>				
Methyl naphthalene (molten)	MNA	32	D	E			Yes	<u>'</u>				
Mineral spirits	MNS	33	D			A	Yes	1	······································	- <u>-</u>		
Myrcene	MRE	30	D	D		A	Yes	1				
Naphtha: Heavy	NAG	33	D	#		$\frac{\Lambda}{A}$	Yes	1				
Naphtha: Petroleum	PTN	33		#		A	Yes					
Naphtha: Solvent	NSV	33	D	D D		A		1				
Naphtha: Stoddard solvent	NSS	33	D	D			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		A	Yes	1				
Nonyl alcohol (all isomers)	NNS	20 s	Đ	E		A	Yes	2				
Nonyl phenol	NNP	21	D	E		A	Yes	1				
Nonyl phenol poly(4+)ethoxylates	NPE	40				A .	Yes	1	·····			
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	_ <u>D</u>	E		<u> </u>	Yes	1				
Octanoic acid (all isomers)	OAY	4		<u> </u>		<u>A</u>	Yes	1				
Octanol (all isomers)	OCX	20 2	D	E		<u> </u>	Yes	1				
Octene (all isomers)	OTX		<u>D</u>	E		A	Yes	1	***************************************			
Oil, fuel: No. 2		30	D	C		Α	Yes	2				
Oil, fuel: No. 2-D	OTW	33	_ <u>D</u>	D/E		Α	Yes	1				
Oil, fuel: No. 4	OTD	33	D	D		Α	Yes	1				
Oil, fuel: No. 5	OFR OFR	33	<u>D</u>	D/E	********	Α	Yes	1				
Oil, fuel: No. 6	OFV	33		D/E		_ <u>A</u>	Yes	11	· · · · · · · · · · · · · · · · · · ·			
Oil, misc: Crude	OSX	33	D	E		<u> </u>	Yes	1				
Oil, misc: Diesel	OIL	33	<u>D</u>	C/D		Α	Yes	1				
Oil, misc: Gas, high pour	ODS	33	D	D/E		Α	Yes	1				
Oil, mise: Lubricating	OGP	33	<u>D</u>	E		A	Yes	1				
Oil, misc: Residual	OLB	33	_ D ·	Ε		Α	Yes	1				
Oil, misc; Turbine	ORL	33	D	E		_A	Yes	1				
n-Pentyl propionate	OTB	33	Đ	E		Α	Yes	1		****		
alpha-Pinene	PPE	34	D	D		Α	Yes	1	70.444.74			
beta-Pinene	PIO	30	D	D		A	Yes	1				
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PIP	30	D	D		Α	Yes	1				
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAG	40	<u>D</u>	E		Α	Yes	1				
Polybutene	PAF	34	D	Ε		A	Yes	1				
Polypropylene glycol	PLB	30	D	E		Α	Yes	1				
so-Propyl acetate	PGC	40	D	E		A	Yes	1				
	IAC	34		C		Α	Yes	1				
1-Propyl acetate .	PAT	34		C		Α	Yes	1				
so-Propyl alcohol n-Propyl alcohol	IPA	20 <sup>2</sup>		С		A	Yes	1				
The state of the s	PAL	20 <sup>2</sup>		С		Α	Yes	1				
Propylbenzene (all isomers)	PBY	32		D	·····	Α	Yes	1				
so-Propylcyclohexane	IPX	31	D	D		Α	Yes	1				
Propylene glycol	PPG	20 <sup>2</sup>	D	Ε		Α	Yes	1	,			
Propylene glycol methyl ether acetate	PGN	34		D		Α	Yes	1				
Propylene tetramer	РТТ	30		D		Α	Yes	1				
Sulfolane	SFL	39	D	E	,	Α	Yes	1	<u> </u>	<del>,,,,,,,,,,</del>		





Serial #: C1-1204976 Dated: 11-Dec-12

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: SMI 30045

Official #: 1246170

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Shipyard: Kennedy

Construction

Cargo Identifica	ation					Conditions of Carriage						
Name Tetraethylene glycol Tetrahydronaphthalene	Chem Code TTG	Compat Group No 40	Sub Chapter D	Grade E	Huil Tvae	Tank Group A	Vapor F App'd	<i>lecovery</i> VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
Totuene	THN	32	D	E		Α	Yes	1				
	TOL	32	D	C		Α	Yes	1		·—-		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Ε		Α	Yes	1				
Triethylbenzene	TEB	32	D	E	******	A	Yes	<u>.</u>				
Triethylene glycol	TEG	40	D	E		Α	Yes					
Triethyl phosphate	TPS	34	D	E			Yes	<u>'</u>		·		
Trimethylbenzene (all isomers)	TRE	32	D	{D}	······································		Yes					
Trixylenyl phosphate	TRP	34	D	E.		A		•				
Undecene	UDC	30		D/E			Yes					
1-Undecyl alcohol	UND		D	E E		<u> </u>	Yes	1				
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		A	Yes	1	The second secon			





Serial #: C1-1204976 Dated: 11-Dec-12

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: SMI 30045 Official #: 1246170

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Shipyard: Kennedy Const

Huil#: H123

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

Cargo identification

Name Chem Code

Compatability Group No.

Note 1 Note 2

Subchapter

Subchapter D Subchapter O

Grade

Hull Type

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 (202) 372-1425.

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

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

e subchapter in Title 46. Code of Federal Hegulations under which the cargo has been classified.
Those flammable and combustible liquids listed in 46 CFR Table 30.26-1.
Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2.
Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges.

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

Ifrage of that grade of cargo.

Flammable flquid cargoes, as defined in 46 CFR 30-10.22.

Combustible liquid cargoes, as defined in 46 CFR 30-10.15.

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

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

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

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 the cargo. See 46 CFR 151.10-1 (b) (1). Designed to carry products of sufficeint hazard to require a moderate degree of control. See 46 CFR 151.10-1 (b) (4).

Not applicable to barges certificated under Subchapter D.

#### Conditions of Carriage

Tank Group Vapor 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

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

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

VCS Category:

The specified cargo's provisional classification for vapor control systems.

Category 1

(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-16)) must use appropriate friction factors, vapor densities and vapor growth rates.

Category 2

(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. Marine inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation

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.

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