(27-53) (27-53)			Departmer United	d States of A it of Homela States Coas	nd Securi It Guard		Certification Date	
			<i>ificat</i> e enlificate fulfills the requi	-			<b>ÍON</b> a safe manning docum	MENT.
Vessel Name			Micial Number	IMO Numi	ier	Call Sign	Service	
KIRBY 31010			1229236				Tank Ba	arge
Halling Port			Hull Material	Home	power	Propulsic		
GIBSON, LA			Steel	1010	power	Tropulat		
UNITED STA	TES		UICOI					
Place Buill			Delivery Data	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
MORGAN CI	TY, LA		15Sep2010	19A612010	R-1619	R-1619		R-297.5
UNITED STA	TES		•	,	۴	· [-		10
Owner KIRBY INLAN 55 WAUGH I HOUSTON, 1 UNITED STA	OR STE 1000 X 77007	<b>q</b>		1835 Char	Y INLAND 0 Market Si nelview, TX ED STATE	treet ( 77530	_P	
			lowing licensed kermen, 0 HSC				l in which there mu tors.	ist be
0 Masters		0 Licensed Ma		Engineers		lilers		
0 Chief Mate 0 Second Ma		0 First Class F 0 Radio Office		Assistant Enginee nd Assistant Engi				
0 Third Mate		0 Able Seame		Assistant Engine				
	t Class Pilot	0 Ordinary Se		sed Engineers				
0 Mate First		0 Deckhands		led Member Engi Persons in cr		ons in addit	tion to crew, and n	o Others, Total
Persons allow			·					
	nitted And Co		Operation: olus Limitec	Constitute				
LIMITED COA: VISIBILITY,	STWISE SERVIC	CE: IN SEAS AN TWELVE ()	OF LESS THAN 12) MILES FROM	THREE (03) F SHORE BETWE	EET, WIND EN ST. MAR	LESS THAN KS AND CAI	TWENTY (20) KNC RRABELLE, FLORID	DTS AND CLEAR
21 (B); IF VESSEL MUST	THIS VESSEL ]	IS OPERATED D USING SAL	IN SALT WATER	MORE THAN S	IX (6) MON	THS IN AN	RDANCE WITH 46 C Y TWELVE (12) MC FIED IN WRITING	NTH PERIOD, TH
			NAL CERTIFIC			-		
Inspection, H	ection for Cer ouma, Louisia regulations pr	na certified t	he vessel, in all	eted at Houma respects, is in	a, LA, UNITI conformity	ED STATE with the ap	S, the Officer in C plicable vessel ins	Charge, Marine spection laws and
, ing ruida and		eriodic/Re-In		1	'his certifj <b>e</b> a	la issued t	E. De -	
Date	, Zone	A/P/R			M. M.	SPOLAR	CH, COR USCG,	By Direction
11-5-27	HOUSTON	A	SAKE FRAN		flicer In Charge, N			······
01.18.24	HOUSTON	. 1	JAKE FRAN	C15	spection Zone	<u></u> H	ouma, Louislana	· · · · · · · · · · · · · · · · · · ·
11-7-24	1 Men Onlyn	SIA	Sigt Sin					

80).



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

# Certificate of Inspection

### Vessel Name: KIRBY 31010

THIS TANK BARGI PROGRAM (TBSIP) ACTION PLAN (TA	). INSPECTION ACTI	IN THE EIGHTH-NINTH VITIES ABOARD THIS SUES CONCERNING TH	BARGE SHALL BE CO	DNDUCTE	D IN ACCORDANCE	WITH ITS TANK BARGE
Hull Exam	S					
Exam Type	Next E	Exam	Last Exam		Prior Exa	am
DryDock	31Oct	2030	30Nov2020		30Oct20	15
Internal Structure	e 31Oct	2025	30Nov2020		30Oct20	15
Liquid/Ga	s/Solid Cargo A	Authority/Condit	ions			
Authorization:	FLAMMABLE/COM	BUSTIBLE AND SPE	CIFIED HAZARDO	US CAR	RGOES	
Total Capacity	Units	Highest Grade Type	Part151 Regulate	ed Pa	rt153 Regulated	Part154 Regulated
29890	Barrels	A	Yes	No	1	No
*Hazardous Bul	k Solids Authority*					
*Loading Const	raints - Structural*					×
Tank Number		Max Cargo Weight	per Tank (short tons	)	Maximum Densit	ty (lbs/gal)
1 P/S		816			15.00	
2 P/S		813			15.00	
3 P/S		681			15.00	
*Loading Const	raints - Stability*					
Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route	Description	
Ш	4401	11ft 0in	15.00	R, LB	S, LC 0-12	
П	3692	9ft 6in	15.00	R, LB	S, LC 0-12	

### \*Conditions Of Carriage\*

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 COMPATABILITY GROUP NUMBERS FROM THE "COMPAT GRP" COLUMN LISTED ABOVE IN THE "SPECIFIED HAZARDOUS CARGO AUTHORITY" SECTION.

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 #C1-1700538 DATED 17 FEB 2017, AND FOUND ACCEPTABLE FOR COLLECTION OF BULK LIQUID CARGO VAPORS ANNOTATED WITH "YES" IN THE CAA'S VCS COLUMN.

PER 46 CFR 151.10-15(c)(2) THE MAX TANK WEIGHTS LISTED BELOW REFLECT UNIFORM (WITHIN 5%) LOADING AT THE DEEPEST DRAFT ALLOWED. WHEN CARRYING SUBCHAPER "O" CARGOES AT SHALLOWER DRAFTS, THE BARGE(S) SHOULD ALWAYS BE LOADED UNIFORMLY, WITHIN 5%.

WHEN USING THE VAPOR CONTROL SYSTEM TO LOAD HIGHLY TOXIC CARGOES (VCS CATEGORY 3, 4 AND/OR 7 CARGOES), THE VESSEL'S OVERFILL ALARM AND SHUTDOWN SYSTEM SHALL BE USED AS THE PRIMARY CARGO TANK OVERFILL PROTECTION. THE USE OF SPILL VALVES OR RUPTURE DISKS IS PROHIBITED.

ONLY THOSE CARGOES NAMED IN THE VESSEL'S CARGO AUTHORITY ATTACHMENT, SERIAL #C1-1001842, DATED 08 SEP 2010, MAY BE CARRIED AND THEN ONLY IN THE TANKS INDICATED.

WHEN THE VESSEL IS CARRYING CARGOES CONTAINING GREATER THAN 0.5% BENZENE, THE PERSON IN



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

# Certificate of Inspection

Vessel Name: KIRBY 31010

CHARGE IS RESPONSIBLE FOR ENSURING THE PROVISIONS OF 46 U.S. CODE OF FEDERAL REGUALTIONS PART 197, SUBPART C ARE APPLIED.

### --- Inspection Status ---

\*Cargo Tanks\*

	Internal Exam			External Exam		
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	30Oct2015	30Nov2020	31Oct2030	-	-	-
2 P/S	30Oct2015	30Nov2020	31Oct2030	-	-	-
3 P/S	30Oct2015	30Nov2020	31Oct2030	-	-	-
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1 P/S	-		-	-	-	
2 P/S	-		-	-	-	
3 P/S	_		-	-	-	

### ---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:C

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



## Certificate of Inspection Cargo Authority Attachment

Vessel Name: SMI 30017

Official #: 1229236

Shipyard: CONRAD Hull #: C-908

#### 46 CFR 151 Tank Group Characteristics

Tank Group Information	Cargo	Identificati	on		Caroo		Tanks Cargo Environmental Special Requirements   Transfer Control Fire Special Requirements						Special Requirements				
Tnk Grp Tanks in Group	Density	Press.	Temp.		Seg Tank	_	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction		Temp Cont
A 1P/S, 2P/S, 3P/S	15	Atmos.	Amb.	П	1ii 2ii	Integral Gravity	PV	Closed	П	G-1	Vent N	NA	Portable			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	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										
Acetonitrile	ATN	37	0	С	III	A	Yes	3	No	G
Adiponitrile	ADN	37	0	Е	II	A	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 <sup>2</sup>	0	NA	III	А	No	N/A	.50-81, .50-86	G
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	Ш	А	No	N/A	No	G
Benzene	BNZ	32	0	С	III	А	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 <sup>2</sup>	0	С	III	А	Yes	1	.50-60	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	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	BMH	14	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	III	А	Yes	1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	Ш	А	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	III	А	No	N/A	No	G
Chemical Oil (refined, containing phenolics)	COD	21	0	Е	П	А	No	N/A	.50-73	G
Chlorobenzene	CRB	36	0	D	III	А	Yes	1	No	G
Chloroform	CRF	36	0	NA	III	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	33	0	D	Ш	А	Yes	1	.50-73	G
Creosote	CCW	21 <sup>2</sup>	0	Е	III	А	Yes	1	No	G
Cresols (all isomers)	CRS	21	0	Е	Ш	А	Yes	1	No	G
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	П	А	Yes	4	.55-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	Ш	А	No	N/A	No	G
1,1-Dichloroethane	DCH	36	0	С	III	А	Yes	1	No	G
Dichloromethane	DCM	36	0	NA	Ш	А	Yes	5	No	G
1,1-Dichloropropane	DPB	36	0	С	III	Α	Yes	3	No	G
1,2-Dichloropropane	DPP	36	0	С	Ш	А	Yes	3	No	G
1,3-Dichloropropane	DPC	36	0	С	III	Α	Yes	3	No	G
1,3-Dichloropropene	DPU	15	0	D	П	Α	Yes	4	No	G
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	П	А	Yes	1	No	G
1,4-Dioxane	DOX	41	0	С	П	А	Yes	1	No	G
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	П	А	No	N/A	No	G
EE Glycol Ether Mixture	EEG	40	0	D	111	А	No	N/A	No	G
Ethyl acrylate	EAC	14	0	С	111	А	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethylene cyanohydrin	ETC	20	0	Е	111	А	Yes	1	No	G
Ethylene dichloride	EDC	36 <sup>2</sup>	0	С	Ш	А	Yes	1	No	G
Ethylene glycol hexyl ether	EGH	40	0	Е	Ш	А	No	N/A	No	G



# Certificate of Inspection Cargo Authority Attachment

Vessel Name: SMI 30017 Official #: 1229236

Page 2 of 6

Shipyard: CONRAD Hull #: C-908

Cargo Identification		Conditions of Carriage								
							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. Period
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E		Α	Yes	1	No	G
Ethylene glycol propyl ether	EGP	40	0	Е	III	А	Yes	1	No	G
2-Ethylhexyl acrylate	EAI	14	0	Е	III	А	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethyl methacrylate	ETM	14	0	D/E	III	А	Yes	2	.50-70(a)	G
2-Ethyl-3-propylacrolein	EPA	19 <sup>2</sup>	0	Е	III	А	Yes	1	No	G
Formaldehyde solution (37% to 50%)	FMS	19 <sup>2</sup>	0	D/E	III	А	Yes	1	.55-1(h)	G
Furfural	FFA	19	0	D	III	А	Yes	1	.55-1(h)	G
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	III	А	No	N/A	No	G
Hydrocarbon 5-9	HFN		0	С	III	А	Yes	1	.50-70(a), .50-81(a), (b)	G
Isoprene	IPR	30	0	А	III	А	Yes	7	.50-70(a), .50-81(a), (b)	G
Mesityl oxide	MSO	18 <sup>2</sup>	0	D	III	А	Yes	1	No	G
Methyl acrylate	MAM	14	0	С	III	А	Yes	2	.50-70(a), .50-81(a), (b)	G
Methylcyclopentadiene dimer	MCK	30	0	С	III	А	Yes	1	No	G
Methyl methacrylate	MMM	l 14	0	С	Ш	А	Yes	2	.50-70(a), .50-81(a), (b)	G
alpha-Methylstyrene	MSR	30	0	D	III	А	Yes	2	.50-70(a), .50-81(a), (b)	G
1- or 2-Nitropropane	NPM	42	0	D	Ш	А	Yes	1	.50-81	G
Pentachloroethane	PCE	36	0	NA	Ш	А	No	N/A	No	G
1,3-Pentadiene	PDE	30	0	А	Ш	А	Yes	7	.50-70(a), .50-81	G
Perchloroethylene	PER	36	0	NA	Ш	А	No	N/A	No	G
iso-Propyl ether	IPE	41	0	С	111	А	Yes	1	.50-70(a)	G
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	111	А	No	N/A	.50-73	G
Styrene (crude)	STX		0	D	Ш	А	Yes	2	No	G
Styrene monomer	STY	30	0	D	Ш	А	Yes	2	.50-70(a), .50-81(a), (b)	G
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	III	А	No	N/A	No	G
Tetrahydrofuran	THF	41	0	С	III	А	Yes	1	.50-70(b)	G
1,2,4-Trichlorobenzene	TCB	36	0	Е	Ш	А	Yes	1	No	G
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA		А	Yes	1	No	G
Valeraldehyde (all isomers)	VAK	19	0	D		А	Yes	1	No	G
Vinyl acetate	VAM	13	0	С	Ш	А	Yes	2	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanate	VND	13	0	Е	III	А	No	N/A	.50-70(a), .50-81(a), (b)	G
Subchapter D Cargoes Authorized for Vapor Contro	bl									
Acetone	ACT	18 <sup>2</sup>	D	С		А	Yes	1		
Acetophenone	ACP	18	D	Е		А	Yes	1		
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	Е		А	Yes	1		
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	Е		А	Yes	1		
Amyl acetate (all isomers)	AEC	34	D	D		А	Yes	1		
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		А	Yes	1		
Benzyl alcohol	BAL	21	D	Е		А	Yes	1		
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		A	Yes	1		
Butyl acetate (all isomers)	BAX	34	D	D		А	Yes	1		
Butyl alcohol (iso-)	IAL	20 <sup>2</sup>	D	D		А	Yes	1		
Butyl alcohol (n-)	BAN	20 <sup>2</sup>	D	D		А	Yes	1		
Butyl alcohol (sec-)	BAS	20 <sup>2</sup>	D	С		А	Yes	1		
Butyl alcohol (tert-)	BAT		D	С		А	Yes	1		
Butyl benzyl phthalate	BPH	34	D	Е		А	Yes	1		
Butyl toluene	BUE	32	D	D		А	Yes	1		



# Certificate of Inspection Cargo Authority Attachment

Vessel Name: SMI 30017 Official #: 1229236

Page 3 of 6

Shipyard: CONRAD Hull #: C-908

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. Period				
Caprolactam solutions	CLS	22	D	Е		А	Yes	1	I					
Cyclohexane	CHX	31	D	С		А	Yes	1						
Cyclohexanol	CHN	20	D	Е		А	Yes	1						
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		А	Yes	2						
p-Cymene	CMP	32	D	D		А	Yes	1						
iso-Decaldehyde	IDA	19	D	Е		А	Yes	1						
n-Decaldehyde	DAL	19	D	Е		А	Yes	1						
Decene	DCE	30	D	D		А	Yes	1						
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	Е		А	Yes	1						
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	Е		А	Yes	1						
Diacetone alcohol	DAA	20 <sup>2</sup>	D	D		А	Yes	1						
ortho-Dibutyl phthalate	DPA	34	D	Е		А	Yes	1						
Diethylbenzene	DEB	32	D	D		А	Yes	1						
Diethylene glycol	DEG	40 <sup>2</sup>	D	E		A	Yes	1						
Diisobutylene	DBL	30	D	С		А	Yes	1						
Diisobutyl ketone	DIK	18	D	D		A	Yes	1						
Diisopropylbenzene (all isomers)	DIX	32	D	E		A	Yes	1						
Dimethyl phthalate	DTL	34	D	E		A	Yes	1						
Dioctyl phthalate	DOP	34	D	E		A	Yes	1						
Dipentene	DPN	30	D	D		A	Yes	1						
Diphenyl	DIL	32	D	D/E		A	Yes	1						
Diphenyl, Diphenyl ether mixtures	DDO	33	D	E		A	Yes	1						
Diphenyl ether	DPE	41	D	{E}		A	Yes	1						
Dipropylene glycol	DPG	40	D	E.		A	Yes	1						
Distillates: Flashed feed stocks	DFF	33	D	Е		А	Yes	1						
Distillates: Straight run	DSR	33	D	Е		А	Yes	1						
Dodecene (all isomers)	DOZ	30	D	D		A	Yes	1						
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		A	Yes	1						
2-Ethoxyethyl acetate	EEA	34	D	D		A	Yes	1						
Ethoxy triglycol (crude)	ETG	40	D	E		A	Yes	1						
Ethyl acetate	ETA	34	D	C		A	Yes	1						
Ethyl acetoacetate	EAA	34	D	E		A	Yes	1						
Ethyl alcohol	EAL	20 <sup>2</sup>	D	С		А	Yes	1						
Ethylbenzene	ETB	32	D	С		A	Yes	1						
Ethyl butanol	EBT	20	D	D		A	Yes	1						
Ethyl tert-butyl ether	EBE	41	D	C		A	Yes	1						
Ethyl butyrate	EBR	34	D	D		A	Yes	1						
Ethyl cyclohexane	ECY	31	D	D		A	Yes	1						
Ethylene glycol	EGL	20 <sup>2</sup>	D	E		A	Yes	1						
Ethylene glycol butyl ether acetate	EMA	34	D	E		A	Yes	1						
Ethylene glycol diacetate	EGY	34	D	E		A	Yes	1						
Ethylene glycol phenyl ether	EPE	40	D	E		A	Yes	1						
Ethyl-3-ethoxypropionate	EEP	34	D	D		A	Yes	1						
2-Ethylhexanol	EHX	20	D	E		A	Yes	1						
Ethyl propionate	EPR	34	D	C		A	Yes	1						
Ethyl toluene	ETE	32	D	D		A	Yes	1						
Formamide	FAM	10	D	E		A	Yes	1						
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	E		A	Yes	1						
	171	20		-		~	100	1						



## Certificate of Inspection Cargo Authority Attachment

Vessel Name: SMI 30017 Official #: 1229236

Page 4 of 6

Shipyard: CONRAD Hull #: C-908

Cargo Identification								Condi	tions of Carriage	
							Vapor F	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
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		А	Yes	1		
Gasoline blending stocks: Reformates	GRF	33	D	A/C		А	Yes	1		
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		А	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		А	Yes	1		
Gasolines: Polymer	GPL	33	D	A/C		А	Yes	1		
Gasolines: Straight run	GSR	33	D	A/C		А	Yes	1		
Glycerine	GCR	20 <sup>2</sup>	D	Е		А	Yes	1		
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		А	Yes	1		
Heptanoic acid	HEP	4	D	Е		А	Yes	1		
Heptanol (all isomers)	HTX	20	D	D/E		А	Yes	1		
Heptene (all isomers)	HPX	30	D	С		А	Yes	2		
Heptyl acetate	HPE	34	D	Е		А	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		А	Yes	1		
Hexanoic acid	HXO	4	D	Е		А	Yes	1		
Hexanol	HXN	20	D	D		А	Yes	1		
Hexene (all isomers)	HEX	30	D	С		А	Yes	2		
Hexylene glycol	HXG	20	D	Е		А	Yes	1		
Isophorone	IPH	18 <sup>2</sup>	D	Е		А	Yes	1		
Jet fuel: JP-4	JPF	33	D	Е		А	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		А	Yes	1		
Kerosene	KRS	33	D	D		А	Yes	1		
Methyl acetate	MTT	34	D	D		А	Yes	1		
Methyl alcohol	MAL	20 <sup>2</sup>	D	С		А	Yes	1		
Methylamyl acetate	MAC	34	D	D		А	Yes	1		
Methylamyl alcohol	MAA	20	D	D		А	Yes	1		
Methyl amyl ketone	MAK	18	D	D		А	Yes	1		
Methyl tert-butyl ether	MBE	41 <sup>2</sup>	D	С		А	Yes	1		
Methyl butyl ketone	MBK	18	D	С		А	Yes	1		
Methyl butyrate	MBU	34	D	С		А	Yes	1		
Methyl ethyl ketone	MEK	18 <sup>2</sup>	D	С		А	Yes	1		
Methyl heptyl ketone	MHK	18	D	D		А	Yes	1		
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	С		А	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	Е		А	Yes	1		
Mineral spirits	MNS	33	D	D		А	Yes	1		
Myrcene	MRE	30	D	D		А	Yes	1		
Naphtha: Heavy	NAG	33	D	#		А	Yes	1		
Naphtha: Petroleum	PTN	33	D	#		А	Yes	1		
Naphtha: Solvent	NSV	33	D	D		А	Yes	1		
Naphtha: Stoddard solvent	NSS	33	D	D		А	Yes	1		
Naphtha: Varnish makers and painters (75%)	NVM	33	D	С		А	Yes	1		
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		А	Yes	1		
Nonene (all isomers)	NON	30	D	D		А	Yes	2		
Nonyl alcohol (all isomers)	NNS	20 <sup>2</sup>	D	Е		А	Yes	1		
Nonyl phenol	NNP	21	D	Е		А	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	Е		А	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		А	Yes	1		



# Certificate of Inspection Cargo Authority Attachment

Vessel Name: SMI 30017 Official #: 1229236

Page 5 of 6

Shipyard: CONRAD Hull #: C-908

Cargo Identification	Conditions of Carriage									
	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
Octanoic acid (all isomers)	OAY	4	D	Е		А	Yes	1		
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	Е		А	Yes	1		
Octene (all isomers)	OTX	30	D	С		А	Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E		А	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		А	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		А	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		А	Yes	1		
Oil, fuel: No. 6	OSX	33	D	Е		А	Yes	1		
Oil, misc: Crude	OIL	33	D	C/D		А	Yes	1		
Oil, misc: Diesel	ODS	33	D	D/E		А	Yes	1		
Oil, misc: Gas, high pour	OGP	33	D	Е		А	Yes	1		
Oil, misc: Lubricating	OLB	33	D	Е		А	Yes	1		
Oil, misc: Residual	ORL	33	D	Е		А	Yes	1		
Oil, misc: Turbine	OTB	33	D	Е		А	Yes	1		
Pentane (all isomers)	PTY	31	D	А		А	Yes	5		
Pentene (all isomers)	PTX	30	D	А		А	Yes	5		
alpha-Pinene	PIO	30	D	D		А	Yes	1		
beta-Pinene	PIP	30	D	D		А	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	Е		А	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	Е		А	Yes	1		
Polybutene	PLB	30	D	Е		А	Yes	1		
Polypropylene glycol	PGC	40	D	Е		А	Yes	1		
iso-Propyl acetate	IAC	34	D	С		А	Yes	1		
n-Propyl acetate	PAT	34	D	С		А	Yes	1		
iso-Propyl alcohol	IPA	20 <sup>2</sup>	D	С		А	Yes	1		
n-Propyl alcohol	PAL	20 <sup>2</sup>	D	С		А	Yes	1		
Propylbenzene (all isomers)	PBY	32	D	D		А	Yes	1		
iso-Propylcyclohexane	IPX	31	D	D		А	Yes	1		
Propylene glycol	PPG	20 <sup>2</sup>	D	Е		А	Yes	1		
Propylene glycol methyl ether acetate	PGN	34	D	D		А	Yes	1		
Propylene tetramer	PTT	30	D	D		А	Yes	1		
Sulfolane	SFL	39	D	Е		А	Yes	1		
Tetraethylene glycol	TTG	40	D	Е		А	Yes	1		
Tetrahydronaphthalene	THN	32	D	Е		А	Yes	1		
Toluene	TOL	32	D	С		А	Yes	1		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		А	Yes	1		
Triethylbenzene	TEB	32	D	E		A	Yes	1		
Triethylene glycol	TEG	40	D	E		A	Yes	1		
Triethyl phosphate	TPS	34	D	E		A	Yes	1		
Trimethylbenzene (all isomers)	TRE	32	D	{D}		A	Yes	1		
Trixylenyl phosphate	TRP	34	D	E		A	Yes	1		
Undecene	UDC	30	D	D/E		A	Yes	1		
1-Undecyl alcohol	UND	20	D	E		A	Yes	1		
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		A	Yes	1		
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# **Certificate of Inspection** Cargo Authority Attachment

Vessel Name: **SMI 30017** Official #: 1229236

Page 6 of 6

Shipyard: CONRAD Hull #: C-908

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

Cargo Identification	
Name	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 none	The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual. Certain mixtures of cargoes may not have a CHRIS Code assigned.
Compatability Group No.	The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of 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.
Note 1	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	(202) 372-1425. 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 Subchapter O Note 3	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
A, B, C	that grade of cargo. Flammable liquid cargoes, as defined in 46 CFR 30-10.22.
D, E	Combustible liquid cargoes, as defined in 46 CFR 30-10.22.
Note 4	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.
Hull Type	The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1.
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).
III NA	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	The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo.
Vapor Recovery	
Approved (Y or N)	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 Approved (Y or N)	Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.
VCS Category:	The specified cargo's provisional classification for vapor control systems.
Category 1	(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates.
Category 2	(Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by 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 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	(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 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	(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.

U.S. Department of Homeland Security

United States Coast Guard Commanding Officer United States Coast Guard Marine Safety Center US Coast Guard Stop 7430 2703 Martin Luther King Jr Ave SE Washington, DC 20593-7430 Staff Symbol: MSC-3 Phone: (202) 795-6731 Email: msc@uscg.mil

16710/P018412/mpc Serial: C1-1602921 August 10, 2016

The Shearer Group, Inc Attn: Mr. Harrison Brann 3101 NASA Parkway, Suite I Seabrook, TX 77586 Email: hbrann@shearer-group.com

- Subj: Multi-Breasted Tandem Loading for Settoon Towing, LLC Unmanned Double Hull Tank Barges (O/D) Rivers; Lakes, Bays, and Sounds Multi-breasted Tandem Loading
- Ref: (a) The Shearer Group, Dwg. No. 0231-018-043, Rev. 5, "Tank Barge Tandem Loading," dated July 22, 2016
  - (b) Your letter Corr. No. 0231-018-SUBMIT005 dated July 22, 2016
  - (c) MSC letter Serial No. C1-1402458 dated July 18, 2014
  - (d) MSC letter Serial No. C1-1500300 dated January 25, 2015
  - (e) MSC letter Serial No. C1-1501614 dated April 13, 2015
  - (f) MSC letter Serial No. C1-1602221 dated June 10, 2016
  - (g) Marine Safety Information bulletin 11-14, dated July 18, 2014

Dear Mr. Brann:

In response to your email dated July 22, 2016 (MSC Document No. 1615825), we have reviewed all previously submitted pressure drop calculations for multi-breasted tandem loading. The barges listed in enclosure (1) barges have vapor control systems previously approved by the letters listed in enclosure (1) for the applicable barges, and are acceptable for dual loading operations. Based on the calculations in references (a), tandem loading is limited to simultaneous collection of those cargoes listed in the vessels' CAA at a maximum transfer rate of **5,000 bbl/hr** per barge.

For the OCMI's convenience, we have included the following recommended COI endorsement:

In accordance with 46 CFR Part 39.1017 and 39.5000(e) this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved to tandem load with this vessel.

Please note that in accordance with the procedural changes outlined in reference (g), tandem loading no longer requires final approval by Commandant (CG-ENG-5), but may be approved by

Subj: Multi-Breasted Tandem Loading for Settoon Towing, LLC

16710/P018412/mpc Serial: C1-1602921 August 10, 2016

the local Officer in Charge, Marine Inspection (OCMI) and may be subject to additional operational requirements.

Please contact LT Michael Comerford at (202) 795-6782 with questions concerning our review.

Sincerely,

R. W. MOWBRAY Lieutenant, U. S. Coast Guard Chief, Vessel and Cargo Branch By direction

Encl: (1) List of Applicable Barges

## 16710/P018412/mpc Serial: C1-1602921 August 10, 2016

Name	Builder	Hull #	Official No.	MAWP [psi]	PV Valve Setting [psig]	VCS Approval Letter	Approval Date
E2MS 300	Trinity, Ashland City	4943	1243228	3.00	1.5/-0.5	C1-1204608	November 2, 2012
E2MS 301	Trinity, Ashland City	4944	1243229	3.00	1.5/-0.5	C1-1204608	November 2, 2012
E2MS 302	Trinity, Ashland City	4968	1248273	3.00	1.5/-0.5	C1-1302286	August 20, 2013
E2MS 303	Trinity, Ashland City	4969	1248274	3.00	1.5/-0.5	C1-1302286	August 20, 2013
E2MS 304	Trinity, Ashland City	5041	1253982	3.00	1.5/-0.5	C1-1402458	July 18, 2014
E2MS 305	Trinity, Ashland City	5042	1254052	3.00	1.5/-0.5	C1-1402458	July 18, 2014
SMI 10001	Trinity, Ashland City	5051	1255567	3.00	2.5/-0.5	C1-1403077	September 17, 2014
SMI 10002	Trinity, Ashland City	5052	1255568	3.00	2.5/-0.5	C1-1403077	September 17, 2014
SMI 10003	Trinity, Ashland City	5053	1255569	3.00	2.5/-0.5	C1-1403077	September 17, 2014
SMI 10004	Trinity, Ashland City	5085	1255570	3.00	2.5/-0.5	C1-1403077	September 17, 2014
SMI 30007	Trinity, Madisonville	2177-1	1216337	3.00	1.5/-0.5	C2-0803792	December 29, 2008
SMI 30010	Trinity, Madisonville	2177-2	1216338	3.00	1.5/-0.5	C2-0803792	December 29, 2008
SMI 30011	Trinity, Madisonville	2177-3	1216339	3.00	1.5/-0.5	C2-0803792	December 29, 2008
SMI 30012	Trinity, Madisonville	2177-4	1216340	3.00	1.5/-0.5	C2-0803792	December 29, 2008
SMI 30014	Conrad Industries, Inc.	C-890	1222699	3.00	1.5/-0.5	C2-0902035	July 14, 2009
SMI 30015	Conrad Industries, Inc.	H-407	1222689	3.00	1.5/-0.5	C2-0902035	July 14, 2009
SMI 30016	Trinity, Ashland City	4749	1225135	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30017	Conrad Industries, Inc.	C-908	1229236	3.00	1.5/-0.5	C2-0902035	July 14, 2009
SMI 30018	Conrad Industries, Inc.	C-909	1229235	3.00	1.5/-0.5	C2-0902035	July 14, 2009
SMI 30019	Trinity, Madisonville	2192-1	1231348	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30020	Trinity, Madisonville	2192-2	1231349	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30021	Trinity, Madisonville	2191-1	1231350	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30022	Trinity, Madisonville	2191-2	1231351	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30023	Trinity, Ashland City	4791	1234345	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30024	Trinity, Ashland City	4792	1234347	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30025	Trinity, Ashland City	4793	1234348	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30026	Trinity, Ashland City	4794	1234349	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30027	Trinity, Ashland City	4802	1234351	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30028	Trinity, Ashland City	4803	1234352	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30029	Trinity, Ashland City	4804	1234354	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30030	Trinity, Ashland City	4805	1234355	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30031	Trinity, Ashland City	4806	1234356	3.00	1.5/-0.5	C1-1000795	March 25, 2010
SMI 30032	Trinity, Madisonville	2203-1	1239856	3.00	1.5/-0.5	C1-1202856	June 6, 2012
SMI 30033	Trinity, Madisonville	2203-2	1239857	3.00	1.5/-0.5	C1-1202856	June 6, 2012
SMI 30034	Trinity, Madisonville	2204-1	1239887	3.00	1.5/-0.5	C1-1202871	June 6, 2012

## **Enclosure 1 – List of Applicable Barges**