

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

Certification Date: 29 Aug 2018 Expiration Date: 29 Aug 2019

### 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 Certificate of Inspection is issued under the provision of Title 46 United States Code, Section 399, in lieu of the regular certificate of inspection, and shall be in force only until the receipt on board said vessel of the original certificate of inspection, this certificate in no case to be valid after one year from the date of inspection.

Vessel Name Official Number Call Sign IMO Number Service HFL 400 1167169 Tank Barge Hailing Port Hull Material Horsepower Propulsion BOWLING GREEN, KY Steel UNITED STATES Place Built Delivery Date Gross Tons Keel Laid Date Net Tons DWT JEFFERSONVILLE, IN R-1619 R-1619 R-297.5 09May2005 26Jan2005 1-UNITED STATES

0 Masters

HINES FURLONG LINE INC 996 WILKINSON TRACE SUITE C-1 BOWLING GREEN, KY 42103 **UNITED STATES** 

Operator

FLORIDA MARINE TRANSPORTERS INC 2360 FIFTH STREET Mandeville, LA 70471 **UNITED STATES** 

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Licensed Mates 0 Chief Engineers 0 Chief Mates 0 First Class Pilots 0 First Assistant Engineers 0 Second Mates 0 Radio Officers

0 Second Assistant Engineers 0 Third Mates 0 Able Seamen 0 Third Assistant Engineers 0 Master First Class Pilot 0 Ordinary Seamen . 0 Licensed Engineers 0 Mate First Class Pilots 0 Deckhands 0 Qualified Member Engineer

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:

#### --- Lakes, Bays, and Sounds---

in fair weather only, not more than twelve (12) miles from shore between St. Marks and Carrabelle, Florida.

This vessel has been granted a fresh water service examination interval in accordance with 46 CFR Table 31.10-21(b); if this vessel is operated in salt water more than six (6)months in any twelve (12) month period, the vessel must be inspected using salt water intervals and the cognizantOCMI notified in writing as soon as this

### \*\*\*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.

D / T				This certificate issued by:
Date	Zone	A/P/R	Signature	T.C. PHILLIPS, COMMANDER, by direction
				Officer in Charge, Marine Inspection
				Sector New Orleans
				Inspection Zone

Dept. Of Home Sec., USCG - CG-854 (Rev. 06-04)

OMB Approved No. 1625-0057



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

Certification Date: 29 Aug 2018 **Expiration Date:** 29 Aug 2019

### Temporary Certificate of Inspection

Vessel Name: HFL 400

---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

15Jul2023

15Jul2013

09May2005

Internal Structure

13Aug2023

13Aug2018

15Jul2013

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

Authorization:

GRADE "A" AND LOWER & SPECIFIED HAZARDOUS CARGOES

**Total Capacity** 

Highest Grade Type

Part151 Regulated Part153 Regulated Part154 Regulated

33603

Barrels

Yes

No

No

\*Hazardous Bulk Solids Authority\*

\*Loading Constraints - Structural\*

Tank Number

Max Cargo Weight per Tank (short tons)

Maximum Density (lbs/gal)

1 P/S 2 P/S

743 867

13.6

3 P/S

784

13.6

13.6

Port Slop

Stbd Slop

\*Loading Constraints - Stability\*

Hull Type

Maximum Load (short tons)

Maximum Draft

Max Density

Route Description

11

3692

(ft/in) 9ft 9in (lbs/gal) 13.6

R, LBS

III

4560

11ft 6in

13.6

R, LBS

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial C2-0503726, dated 18-Feb-05, 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.

#### \*Stability and Trim\*

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 8.7 lbs/gal. Cargoes with higher densities, up to 13.6 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

#### \*Vapor Control Authorization\*

In accordance with 46 CFR 39, excluding 46 CFR 39.40, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter Serial C2-0503726 dated 18-Feb-05 and the list of authorized cargoes on the CAA, Serial C2-0503726 dated 18-Feb-05, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.



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

Certification Date: 29 Aug 2018 Expiration Date: 29 Aug 2019

OMB Approved No. 1625-0057

### Temporary Certificate of Inspection

Vessel Name: HFI 400

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

#### \*Cargo Tanks\*

ı.	•						
		Internal Exan	ı		External Exa	m	
	Tank Id	Previous	Last	Next	Previous	Last	Next
	1 P/S	-	15Jul2013	15Jul2023	-8	-	-
	. 2 P/S		15Jul2013	15Jul2023		= :	-
	3 P/S		15Jul2013	15Jul2023	-8	-	-
	Port Slop	09May2005	15Jul2013	15Jul2023	-	-	-
-	Stbd Slop	09May2005	15Jul2013	15Jul2023	-	-	Œ
		121		Hydro Test			
-	Tank Id	Safety Valve	S	Previous	Last	Next	
	1 P/S	=			-	-	
	2 P/S	-		<b>-</b> 5, 77	-	-	
	3 P/S	-		-	-	-	
	Port Slop			- E	*	-	
	Stbd Slop	e <del>-</del>		-	-		

#### --- 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

B-II

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



Generated: 18-Feb-05

# Certificate of Inspection

### Cargo Authority Attachment

Vessel Name: HFL 400 Shipyard: Jeffboat Official #: 1167169 Hull #: 04-2206

46 CFR 151 Tank (	Cargo Identification				Cargo	Tanks			Cargo Transfer		Environmental Control		Fire	Special Requirements			
Tnk Grp Tanks in Group	Density	Press.	Temp.		Seg Tank	Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Tem p
A #1-3 P/S	13.6	Atmos.	Amb.	II	1ii 2ii	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

#### **List of Authorized Cargoes**

Cargo Identification	Conditions of Carriage								
							Vapor R	ecovery	
Name	Chem Code	Compat Group	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 Construction
Authorized Subchapter O Cargoes									
Acetonitrile	ATN	37	0	С	III	Α	Yes	3	No
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	Ш	Α	Yes	4	.50-70(a), .55-1(e)
Adiponitrile	ADN	37	0	Е	II	Α	Yes	1	No
Alkyl(C7-C9) nitrates	AKN	34 <sup>2</sup>	0	NA	Ш	Α	No	N/A	.50-81, .50-86
Aminoethylethanolamine	AEE	8	0	Е	III	Α	Yes	1	.55-1(b)
Ammonium bisulfite solution (70% or less)	ABX	43 <sup>2</sup>	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (b), (c)
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	III	Α	No	N/A	.56-1(a), (b), (c), (f), (g)
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	II	Α	No	N/A	No
Benzene	BNZ	32	0	С	III	Α	Yes	1	.50-60
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 <sup>2</sup>	0	С	III	Α	Yes	1	.50-60
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	BHA	32 2	0	С	III	Α	Yes	1	.50-60, .56-1(b), (d), (f), (g)
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	III	Α	Yes	1	.50-60
Butyl acrylate (all isomers)	BAR	14	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
Butyl methacrylate	BMH	14	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
Butyraldehyde (all isomers)	BAE	19	0	С	III	Α	Yes	1	.55-1(h)
Camphor oil (light)	CPO	18	0	D	11	Α	No	N/A	No
Carbon tetrachloride	CBT	36	0	NA	III	Α	No	N/A	No
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	III	Α	No	N/A	.50-73, .55-1(j)
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	III	Α	No	N/A	.50-73, .55-1(j)
Chemical Oil (refined, containing phenolics)	COD	21	0	Е	Ш	Α	No	N/A	.50-73
Chlorobenzene	CRB	36	0	D	III	Α	Yes	1	No
Chloroform	CRF	36	0	Е	III	Α	Yes	3	No
Coal tar naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	.50-73
Creosote	CCW	/ 21 <sup>2</sup>	0	Е	III	Α	Yes	1	No
Cresols (all isomers)	CRS	21	0	Е	III	Α	Yes	1	No
Cresylate spent caustic	CSC	5	0	NA	III	Α	No	N/A	.50-73, .55-1(b)
Cresylic acid tar	CRX	-	0	E	III	Α	Yes	1	.55-1(f)
Crotonaldehyde	CTA	19 <sup>2</sup>		C	II	Α	Yes	4	.55-1(h)
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropy acrolein)	/ CHG		0	С	Ш	Α	No	N/A	No
Cyclohexanone	CCH	18	0	D	III	Α	Yes	1	.56-1(a), (b)
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	Е	III	Α	Yes	1	.56-1 (b)
Cyclohexylamine	CHA	7	0	D	III	Α	Yes	1	.56-1(a), (b), (c), (g)
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	III	Α	Yes	1	.50-60, .56-1(b)
iso-Decyl acrylate	IAI	14	0	Е	III	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)
Dichlorobenzene (all isomers)	DBX	36	0	Е	III	Α	Yes	3	.56-1(a), (b)
1.1-Dichloroethane	DCH		0	С	Ш	Α	Yes	1	No



# Certificate of Inspection

## Cargo Authority Attachment

 Vessel Name:
 HFL 400
 Shipyard:
 Jeffboat

 Official #:
 1167169
 Page 2 of 7
 Hull #:
 04-2206

Cargo Identification							Со	nditio	ns of Carriage
							Vapor Re	ecovery	
Name	Chem Code	Compat Group	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 Construction
2,2'-Dichloroethyl ether	DEE	41	0	D	Ш	Α	Yes	1	.55-1(f)
Dichloromethane	DCM	l 36	0	NA	III	Α	No	N/A	No
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	Е	III	Α	No	N/A	.56-1(a), (b), (c), (g)
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,	<sup>2</sup> O	Α	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or les	s) DDA		0	LFG	III	Α	No	N/A	.55-1(b)
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 <sup>2</sup>	0	Е	III	Α	No	N/A	.56-1(a), (b), (c), (g)
1,1-Dichloropropane	DPB	36	0	С	III	Α	Yes	3	No
1,2-Dichloropropane	DPP	36	0	С	Ш	Α	Yes	3	No
1,3-Dichloropropane	DPC	36	0	С	III	Α	Yes	3	No
1,3-Dichloropropene	DPU	15	0	D	Ш	Α	Yes	4	No
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	II	Α	Yes	1	No
Diethanolamine	DEA	8	0	Е	Ш	Α	Yes	1	.55-1(c)
Diethylamine	DEN	7	0	С	Ш	Α	Yes	3	.55-1(c)
Diethylenetriamine	DET	7 2	0	Е	Ш	Α	Yes	1	.55-1(c)
Diisobutylamine	DBU	7	0	D	Ш	Α	Yes	3	.55-1(c)
Diisopropanolamine	DIP	8	0	Е	III	Α	Yes	1	.55-1(c)
Diisopropylamine	DIA	7	0	С	II	Α	Yes	3	.55-1(c)
N,N-Dimethylacetamide	DAC	10	0	E	III	Α	Yes	3	.56-1(b)
Dimethylethanolamine	DMB	8	0	D	Ш	Α	Yes	1	.56-1(b), (c)
Dimethylformamide	DMF	10	0	D	III	Α	Yes	1	.55-1(e)
Di-n-propylamine	DNA	7	0	С	II	Α	Yes	3	.55-1(c)
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	III	Α	No	N/A	.56-1(b)
Ethanolamine	MEA	8	0	Е	Ш	Α	Yes	1	.55-1(c)
Ethyl acrylate	EAC	14	0	C	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
Ethylamine solution (72% or less)	EAN	7	0	A	II	Α	Yes	6	.55-1(b)
N-Ethylbutylamine	EBA	7	0	D	III	Α	Yes	3	.55-1(b)
N-Ethylcyclohexylamine	ECC	7	0	D	Ш	Α	Yes	1	.55-1(b)
Ethylene cyanohydrin	ETC	20	0	E	III	Α	Yes	1	No
Ethylenediamine	EDA	7 2	0	D	III	Α	Yes	1	.55-1(c)
Ethylene dichloride	EDC	36 <sup>2</sup>	0	С	III	Α	Yes	1	No
Ethylene glycol hexyl ether	EGH	40	0	Е	Ш	Α	No	N/A	No
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	III	Α	Yes	1	No
Ethylene glycol propyl ether	EGP	40	0	E	III	A	Yes	<u>·</u> 1	No
2-Ethylhexyl acrylate	EAI	14	0	E	III	A	Yes	2	.50-70(a), .50-81(a), (b)
Ethyl methacrylate	ETM	14	0	D/E	III	A	Yes	2	.50-70(a)
2-Ethyl-3-propylacrolein	EPA	19 <sup>2</sup>		E	III	A	Yes	1	No
Formaldehyde solution (37% to 50%)	FMS	19 <sup>2</sup>		D/E	III	A	Yes	1	.55-1(h)
Furfural	FFA	19	0	F	III	A	Yes	1	.55-1(h)
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	III	A	No	N/A	No
Hexamethylenediamine solution	HMC		0	E	III	A	Yes	1	.55-1(c)
Hexamethyleneimine	HMI	7	0	C	II	A	Yes	1	.56-1(b), (c)
Hydrocarbon 5-9	HFN		0	С	III	A	Yes	1	.50-70(a), .50-81(a), (b)
Isoprene	IPR	30	0	A	111	A	No	N/A	.50-70(a), .50-81(a), (b)
Isoprene, Pentadiene mixture	IPN	50	0	В	III	A	No	N/A	.50-70(a), .55-1(c)
Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)
Mesityl oxide	MSO	18 <sup>2</sup>	0	D	III	Α	Yes	1	No
Methyl acrylate	MAM		0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)
Methylcyclopentadiene dimer	MCK	30	0	С	Ш	Α	Yes	1	No
Methyl diethanolamine	MDE		0	E	Ш	Α	Yes	1	.56-1(b), (c)
2-Methyl-5-ethylpyridine	MEP	9	0	Е	Ш	Α	Yes	1	.55-1(e)
Methyl methacrylate	MMM		0	C	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
2-Methylpyridine	MPR		0	D	III	A	Yes	3	.55-1(c)



# Certificate of Inspection

### Cargo Authority Attachment

 Vessel Name:
 HFL 400
 Shipyard:
 Jeffboat

 Official #:
 1167169
 Page 3 of 7
 Hull #:
 04-2206

Cargo Identification		Conditions of Carriage							
							Vapor R	ecovery	
Name	Chem Code	Compat Group	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 Construction
alpha-Methylstyrene	MSR	30	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)
Morpholine	MPL	7 2	0	D	Ш	Α	Yes	1	.55-1(c)
1- or 2-Nitropropane	NPM	42	0	D	III	Α	Yes	1	.50-81
1,3-Pentadiene	PDE	30	0	Α	Ш	Α	Yes	7	.50-70(a), .50-81
Perchloroethylene	PER	36	0	NA	Ш	Α	No	N/A	No
Polyethylene polyamines	PEB	7 2	0	Е	III	Α	Yes	1	.55-1(e)
iso-Propanolamine	MPA	8	0	Е	III	Α	Yes	1	.55-1(c)
Propanolamine (iso-, n-)	PAX	8	0	Е	III	Α	Yes	1	.56-1(b), (c)
iso-Propylamine	IPP	7	0	Α	П	Α	No	N/A	.55-1(c)
Pyridine	PRD	9	0	С	Ш	Α	Yes	1	.55-1(e)
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		0		III	Α	No	N/A	.50-73, .55-1(j)
Sodium aluminate solution (45% or less)	SAU	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (b), (c)
Sodium chlorate solution (50% or less)	SDD	0 1,2	<sup>2</sup> O	NA	III	Α	No	N/A	.50-73
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (b)
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 1,2	<sup>2</sup> O	NA	III	Α	Yes	1	.50-73, .55-1(b)
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	SSI	0 1,2	<sup>2</sup> O	NA	III	Α	No	N/A	.50-73, .55-1(b)
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2	<sup>2</sup> O	NA	Ш	Α	No	N/A	.50-73, .55-1(b)
Styrene (crude)	STX		0	D	III	Α	Yes	2	No
Styrene monomer	STY	30	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	III	Α	No	N/A	No
Tetraethylenepentamine	TTP	7	0	Е	III	Α	Yes	1	.55-1(c)
Tetrahydrofuran	THF	41	0	С	III	Α	Yes	1	.50-70(b)
Toluenediamine	TDA	9	0	Е	Ш	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)
1,2,4-Trichlorobenzene	TCB	36	0	Е	III	Α	Yes	1	No
1,1,2-Trichloroethane	TCM	36	0	NA	III	Α	Yes	1	.50-73, .56-1(a)
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA	III	Α	Yes	1	No
1,2,3-Trichloropropane	TCN	36	0	Е	Ш	Α	Yes	3	.50-73, .56-1(a)
Triethanolamine	TEA	8 2	0	Е	III	Α	Yes	1	.55-1(b)
Triethylamine	TEN	7	0	С	Ш	Α	Yes	3	.55-1(e)
Triethylenetetramine	TET	7 2	0	Е	III	Α	Yes	1	.55-1(b)
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	III	Α	No	N/A	.56-1(a), (b), (c)
Trisodium phosphate solution	TSP	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (c).
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	III	Α	No	N/A	.56-1(b)
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (c), (g)
Vinyl acetate	VAM	13	0	С	III	Α	Yes	2	.50-70(a), .50-81(a), (b)
Vinyl neodecanate	VND	13	0	Е	III	Α	No	N/A	.50-70(a), .50-81(a), (b)
Vinyltoluene	VNT	13	0	D	III	Α	Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (g)
Subchapter D Cargoes Authorized for Vapor Control									
Acetone	ACT	18 <sup>2</sup>	D	С		Α	Yes	1	
Acetophenone	ACP	18	D	Е		Α	Yes	1	
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		Α	Yes	1	
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		Α	Yes	1	
Amyl acetate (all isomers)	AEC	34	D	D		A	Yes	1	
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		A	Yes	1	
Benzyl alcohol	BAL	21	D	Е		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	
	IAL	20 <sup>2</sup>	D	D		Α	Yes	1	
Butyl alcohol (iso-)		20				$\overline{}$	163		



# Certificate of Inspection

## Cargo Authority Attachment

 Vessel Name:
 HFL 400
 Shipyard:
 Jeffboat

 Official #:
 1167169
 Page 4 of 7
 Hull #:
 04-2206

Cargo Identification							Co	nditio	ns of Carriage
							Vapor R	ecovery	
Name	Chem Code	Compat Group	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 Construction
Butyl alcohol (sec-)	BAS		D	С		Α	Yes	1	
Butyl alcohol (tert-)	BAT		D	С		Α	Yes	1	_
Butyl benzyl phthalate	BPH	34	D	Е		Α	Yes	1	
Butyl toluene	BUE	32	D	D		Α	Yes	1	
Caprolactam solutions	CLS	22	D	Е		Α	Yes	1	
Cyclohexane	CHX	31	D	С		Α	Yes	1	
Cyclohexanol	CHN		D	E		A	Yes	1	
1,3-Cyclopentadiene dimer (molten)	CPD		D	D/E		Α	Yes	2	_
p-Cymene	CMP	32	D	D		A	Yes	1	
iso-Decaldehyde	IDA	19	D	E		A	Yes	1	
n-Decaldehyde	DAL	19	D	E		A	Yes	<u>·</u> 1	
Decene	DCE		D			A	Yes	1	
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>		E		A	Yes	<u>·</u> 1	
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32		E		A	Yes	1	
Diacetone alcohol	DAA	20 <sup>2</sup>		E		A	Yes	1	
ortho-Dibutyl phthalate	DPA	34	D	E		A	Yes	<u>·</u> 1	
Diethylbenzene	DEB	32	D	D		A	Yes	<u>'</u> 1	
Diethylene glycol	DEG			E		A	Yes	1	
Diisobutylene	DBL		D	C		A	Yes	1	
Diisobutyl ketone	DIK	30 18	D	D		A	Yes	1	
Diisopropylbenzene (all isomers)	DIX	32	D	E E		Α	Yes	1	
Dimethyl phthalate	DTL	34	D			A	Yes	1	
Dioctyl phthalate	DOP		D	E		A	Yes	1	
Dipentene	DPN		D	D	,	Α.	Yes	1	
Diphenyl Bit House to the state of the state	DIL	32	D	D/E		A	Yes	1	
Diphenyl, Diphenyl ether mixtures	DDC		D	E_		Α.	Yes	1	
Diphenyl ether	DPE	41	D	{E}		A	Yes	1	
Dipropylene glycol	DPG		D	E		A	Yes	1	
Distillates: Flashed feed stocks	DFF	33	D	<u>E</u>		A	Yes	1	
Distillates: Straight run	DSR		<u>D</u>	E		Α.	Yes	1	
Dodecene (all isomers)	DOZ	30	D	D		A	Yes	1	
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB		D	Е		Α	Yes	1	
2-Ethoxyethyl acetate	EEA	34	D	D		Α	Yes	1	
Ethoxy triglycol (crude)	ETG	40	D	E		A	Yes	1	
Ethyl acetate	ETA	34	D	С		Α	Yes	1	
Ethyl acetoacetate	EAA	34	D	Е		A	Yes	1	
Ethyl alcohol	EAL	20 <sup>2</sup>	D	С		Α	Yes	1	
Ethylbenzene	ETB	32	D	С		Α	Yes	1	
Ethyl butanol	EBT	20	D	D		A	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 <sup>2</sup>	D	E		Α	Yes	1	
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1	
Ethylene glycol diacetate	EGY	34	D	Е		Α	Yes	1	
Ethylene glycol phenyl ether	EPE	40	D	E		Α	Yes	1	
Ethyl-3-ethoxypropionate	EEP	34	D	Е		Α	Yes	1	
2-Ethylhexanol	EHX	20	D	Е		Α	Yes	1	
Ethyl propionate	EPR	34	D	С		Α	Yes	1	
Ethyl toluene	ETE	32	D	Е		Α	Yes	1	
Formamide	FAM	10	D	Е		Α	Yes	1	
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	Е		Α	Yes	1	



# Certificate of Inspection

## Cargo Authority Attachment

 Vessel Name:
 HFL 400
 Shipyard:
 Jeffboat

 Official #:
 1167169
 Page 5 of 7
 Hull #:
 04-2206

Cargo Identification							Со	nditio	ns of Carriage
							Vapor R	ecovery	
Name	Chem Code	Compat Group	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 Construction
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		А	Yes	1	
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1	_
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		Α	Yes	1	
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С		Α	Yes	1	
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1	
Gasolines: Polymer	GPL	33	D	A/C		Α	Yes	1	
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1	
Glycerine	GCR	20 2	D	Е		Α	Yes	1	
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1	
Heptanoic acid	HEP	4	D	Е		Α	Yes	1	
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	D		Α	Yes	1	
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		Α	Yes	1	
Hexanoic acid	HXO	4	D	Е		Α	Yes	1	
Hexanol	HXN	20	D	D		Α	Yes	1	
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2	
Hexylene glycol	HXG	20	D	Е		Α	Yes	1	
Isophorone	IPH	18 <sup>2</sup>	D	Е		Α	Yes	1	
Jet fuel: JP-4	JPF	33	D	Е		Α	Yes	1	_
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		Α	Yes	1	
Kerosene	KRS	33	D	D		A	Yes	1	
Methyl acetate	MTT	34	D	D		A	Yes	1	
Methyl alcohol	MAL	20 2		C		A	Yes	1	
Methylamyl acetate	MAC		D	D		A	Yes	1	
Methylamyl alcohol	MAA	20	D	D		A	Yes	1	
Methyl amyl ketone	MAK		D	D		A	Yes	1	
Methyl tert-butyl ether	MBE	41 2		C		A	Yes	1	
Methyl butyl ketone	MBK	18	D	C		A	Yes	1	
Methyl butyrate	MBU	34	D	C		A	Yes	1	
Methyl ethyl ketone	MEK			C		A	Yes	1	
Methyl heptyl ketone	MHK		D	D		A	Yes	<u>·</u> 1	
Methyl isobutyl ketone	MIK	18 2		C		A	Yes	1	
Methyl naphthalene (molten)	MNA		D	E		A	Yes	1	
Mineral spirits	MNS		D			A	Yes	1	
Myrcene	MRE		D			A	Yes	1	
Naphtha: Heavy	NAG		D	#		A	Yes	1	
Naphtha: Petroleum	PTN	33	D	#		A	Yes	<u>·</u> 1	
Naphtha: Solvent	NSV		D	D		A	Yes	1	
Naphtha: Stoddard solvent	NSS		D	D		A	Yes	<u>·</u> 1	
Naphtha: Varnish makers and painters (75%)	NVM		D	С		A	Yes	1	
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes	<u>·</u> 1	
Nonene (all isomers)	NON		D	D		A	Yes	2	
Nonyl alcohol (all isomers)	NNS			E		A	Yes	1	
Nonyl phenol	NNP		D	E		A	Yes	1	
	NPE		D			A	Yes	<u>·</u> 1	
Nonyl phenol poly(4+)ethoxylates	OAX		D	C		A	Yes	1	
Octane (all isomers), see Alkanes (C6-C9)	OAX	4	D	E		A	Yes	1	
Octanoic acid (all isomers)	OCX			E				1	
Octano (all isomers)	OCX		D D	C		A A	Yes Yes	2	
Octene (all isomers)									_
Oil, fuel: No. 2	OTW OTD		D D	D/E D		A	Yes	1	
Oil, fuel: No. 2-D	טוט	33	ט	ט		A	Yes	1	



# Certificate of Inspection

## Cargo Authority Attachment

 Vessel Name:
 HFL 400
 Shipyard:
 Jeffboat

 Official #:
 1167169
 Page 6 of 7
 Hull #:
 04-2206

Cargo Identification							Co	nditio	ns of Carriage
			1	1			Vapor Re		T
Name	Chem Code	Compat Group	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 Construction
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	Е		Α	Yes	1	
Oil, misc: Crude	OIL	33	D	C/D		Α	Yes	1	
Oil, misc: Diesel	ODS	33	D	D/E		Α	Yes	1	
Oil, misc: Lubricating	OLB	33	D	Е		Α	Yes	1	
Oil, misc: Residual	ORL	33	D	Е		Α	Yes	1	
Oil, misc: Turbine	ОТВ	33	D	Е		Α	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	
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	Е		Α	Yes	1	
Polybutene	PLB	30	D	Е		Α	Yes	1	
Polypropylene glycol	PGC	40	D	Е		Α	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	
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		Α	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		Α	Yes	1	
Tetraethylene glycol	TTG	40	D	Е		Α	Yes	1	
Tetrahydronaphthalene	THN	32	D	Е		Α	Yes	1	
Toluene	TOL	32	D	С		Α	Yes	1	
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Е		Α	Yes	1	
Triethylbenzene	TEB	32	D	Е		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		Α	Yes	1	
Undecene	UDC	30	D	D/E		Α	Yes	1	
1-Undecyl alcohol	UND	20	D	Е		Α	Yes	1	
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		Α	Yes	1	

Certificate of Inspection Cargo Authority Attachment

Vessel Name: HFL 400 Shipyard: Jeffboat Official #: 1167169 Hull #: 04-2206 Page 7 of 7

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

Cargo Identification

Compatability Group No.

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.

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,

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 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 (G-MSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Note 2 Telephone (202) 267-1217.

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.

Subchapter O Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2.

Note 3 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 Grade 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.

A, B, C

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

chapter 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.

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

NA Not applicable to barges certificated under Subchapter D.

#### Conditions of Carriag

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 Carriag

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 Recover

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 39.30-11).

1(b)) must use appropriate friction factors, vapor densities and vapor growth rates

(Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety componenets and restricting vapor flow which could Category 2

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

(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. Category 3 This requirement is in addition to the requirements of Category 1

(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 (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

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