

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

Certification Date: 23 May 2019 Expiration Date: 23 May 2024



## Certificate of Inspection

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

Certification Date: 23 May 2019 Expiration Date: 23 May 2024

### Certificate of Inspection

Vessel Name: KIRBY 27761

Program (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
 31Mar2029
 23May2019
 10Mar2009

 Internal Structure
 30Apr2024
 23May2019
 23Apr2014

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

Authorization: FLAMMABLE/COMBUSTIBLE LIQUIDS AND SPECIFIED HAZARDOUS CARGOES

Total Capacity Units Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

27800 Barrels A Yes No No

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

Not Authorized

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

Tank Number	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
1 P/S	855	8.74
2 P/S	860	8.74
3 P/S	732	8.74

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

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
II	3784	10ft 0in	13.6	R
II	3784	10ft 0in	13.6	LBS
III	4662	11ft 9in	13.6	R
Ш	4662	11ft 9in	13.6	LBS

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial #C1-1000812, dated March 25, 2010, 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.

#### \*Stability and Trim\*

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.

The maximum design density of cargo which may be filled to the tank top is 8.74 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.

#### \*BENZENE PROHIBITION\*

This vessel does not meet the requirements of 46 CFR 197 for cargo operations involving benzene containing liquids in bulk \_(0.5% or more by volume). This vessel is therefore prohibited from carrying those cargoes listed in Table 30,25-1 of 46 CFR



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

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### Certificate of Inspection

Vessel Name: KIRBY 27761

30, that contain 0.5% or more by volume of benzene.

\*Thermal Fluid Heater\*

The thermal fluid heater and generator are to be operated when carrying grade "E" cargoes only.

--- Inspection Status ---

\*Fuel Tanks\*

Internal Examinations

Tank ID

Previous

Internal Exam

Last

Next

Aft main deck

10Mar2009

\*Cargo Tanks\*

	Internal Exam			External Exar	External Exam				
Tank Id	Previous	Last	Next	Previous	Last	Next			
1 P/S	10Mar2009	23May2019	31Mar2029	-	-	_			
2 P/S	10Mar2009	23May2019	31Mar2029		-	12			
3 P/S	10Mar2009	10Mar2009 23May2019		-					
			Hydro Test						
Tank Id	Safety Valves		Previous	Last	Next				
1 P/S	-		-	10Mar2009	-				
2 P/S			_	10Mar2009	-				
3 P/S	<b>.</b>		-	10Mar2009	_				

#### \*Boilers/Steam Piping\*

Maximum Steam Pressure Allowed: 150

Hydro Inspection

Mountings Inspection

Boiler/Piping ID

Previous

Next

Opened

Removed

800SB-0902-1437

10Mar2009

Fireside Inspection

Waterside Inspection

Boiler/Piping ID

Previous

Last

Next

Previous

Last Next

800SB-0902-1437

10Mar2009

### --- 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

3

B-II

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



Serial #: C1-1000812

25-Mar-10

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: Kirby 27761 Official #: 1217134

Shipyard: Trinity Ashland City

Hull #: 4641

Tank Group Information		nformation Cargo Identification			Cargo	Tanks			Cargo Transfer		Environmental Control		Fire	Special Requirements				
Tnk Grp	Tanks in Group	Density	Press.	Temp.	Hull	Seg	Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	
A #	#1P/S, #2P/S, #3P/S	13.6	Atmos.	Elev	11	1ii 2ii	Integral Gravity	PV	Open	П	G-1	NR	NA	Portable	40-1(f)(1), .50- 70(a), .50-70(b), .50-73, .50-81(b),	55-1(h), (j), 56-1(a), (c), (d), (e), (f), (g),	NR	Yes

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

- 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		Conditions of Carriage								
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Ro App'd	ecovery VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Authorized Subchapter O Cargoes				- 0.00						
Adiponitrile	ADN	37	0	Е	11	Α	No	N/A	No	G
Alkyl(C7-C9) nitrates	AKN	34 <sup>2</sup>	0	NA	111	Α	No	N/A	.50-81, .50-86	G
Anthracene oil (Coal tar fraction)	АНО	33	0	NA	11	Α	No	N/A	No	G
Butyraldehyde (all isomers)	BAE	19	0	С	111	Α	No	N/A	.55-1(h)	G
Camphor oil (light)	СРО	18	0	D	П	Α	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	Ш	Α	No	N/A	No	G
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	111	Α	No	N/A	50-73, .55-1(j)	G
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	Ш	Α	No	N/A	.50-73, .55-1(j)	G
Chlorobenzene	CRB	36	0	D	111	Α	No	N/A	No	G
Chloroform	CRF	36	0	NA	Ш	Α	No	N/A	No	G
Creosote	CCW	21 <sup>2</sup>	0	Е	Ш	Α	No	N/A	No	G
Cresols (all isomers)	CRS	21	0	E	Ш	Α	No	N/A	No	G
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	П	Α	No	N/A	No	G
Ethylene cyanohydrin	ETC	20	0	Е	111	Α	No	N/A	No	G
Ethylene glycol hexyl ether	EGH	40	0	E	111	Α	No	N/A	No	G
Ethylene glycol propyl ether	EGP	40	0	E	Ш	Α	No	N/A	No	G
2-Ethylhexyl acrylate	EAI	14	0	E	Ш	Α	No	N/A	50-70(a), 50-81(a), (b)	G
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	111	Α	No	N/A	No	G
Isoprene	IPR	30	0	Α	111	Α	No	N/A	.50-70(a), .50-81(a), (b)	G
Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxid	e) SAP		0		111	Α	No	N/A	.50-73, .55-1(j)	G
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	Ш	Α	No	N/A	50-73	G
Styrene monomer	STY	30	0	D	111	Α	No	N/A	50-70(a), 50-81(a), (b)	G
Trisodium phosphate solution	TSP	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (c).	G
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G
Vinyl acetate	VAM	13	0	С	Ш	Α	No	N/A	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanate	VND	13	0	Е	111	Α	No	N/A	.50-70(a), .50-81(a), (b)	G



Serial #

C1-1000812



# Certificate of Inspection

### Cargo Authority Attachment

Vessel Name: Kirby 27761 Official #: 1217134

Page 2 of 2

Shipyard: Trinity Ashland

Hull #: 4641

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

Cargo Identification

Chem Code

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

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.

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 1

(202) 372-1425. See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart

Note 2

Subchapter Subchapter D Subchapter O Note 3

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

Those flammable and combustible liquids listed in 46 CFR Table 30.25-1.

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

Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges

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 Note 4 Flammable liquid cargoes, as defined in 46 CFR 30-10.22. Combustible liquid cargoes, as defined in 46 CFR 30-10.15.

The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the

cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo Those subchapter O cargoes which are not classified as a flammable or combustible liquid.

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

Hull Type

NA

NA

The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1.

Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1).

Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3).

Designed to carry products of 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 Recovery Approved (Y or N) The vessel's tank group (as defined in Section 4) which is authorized for camage of the named cargo

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

#### Conditions of Carriage

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

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified 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.

(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)) Category 1

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 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. requirement is in addition to the requirements of Category 1.

Category 6 Category 7

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

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