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

| Certification Date: | 23 Apr 2020 |
|---|---|
| Expiration Date: | 23 Apr 2025 |

# 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.

| Vessel Name | Official Number | IMO Number | Call Sign | Service |
|---|---|---|---|---|
| KIRBY 27721 | 1162078 | | | Tank Barge |

| Hailing Port | Hull Material | Horsepower | Propulsion |
|---|---|---|---|
| WILMINGTON, DE<br>UNITED STATES | Steel | | |

| Place Built | Delivery Date | Keel Laid Date | Gross Tons | Net Tons | DWT | Length |
|---|---|---|---|---|---|---|
| ASHLAND CITY, TN<br>UNITED STATES | 20Jan2005 | 26Oct2004 | R-1632<br>I- | R-1632<br>I- | | R-300.0<br>I-0 |

Owner
KIRBY INLAND MARINE, LP
55 WAUGH DRIVE SUITE 1000
HOUSTON, TX 77007
UNITED STATES

Operator
KIRBY INLAND MARINE, LP
18350 MARKET ST.
CHANNELVIEW, TX 77530
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 Masters | 0 Licensed Mates | 0 Chief Engineers | 0 Oilers |
| 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---**

This vessel has been granted a fresh water service examination interval in accordance with 46 CFR 31.10-21(a)(2). If this vessel is operated in salt water more than 6 months in any 12 month period, the vessel must be inspected using salt water intervals per 46 CFR 31.10-21(a)(1) and the cognizant OCMI must be notified in writing as soon as this change in status occurs.

This tank barge is participating in the Eighth and Ninth Coast Guard District's Tank Barge Streamlined Inspection Program (TBSIP). Inspection activities aboard this barge shall be conducted in accordance with its Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to OCMI Houston-Galveston

***SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION***

With this Inspection for Certification having been completed at Port Arthur, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Marine Safety Unit Port Arthur certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

| Date | Zone | A/P/R | Signature |
|---|---|---|---|
| 2-22-21 | New Orleans | A | Scott Fiorito |
| 4-25-22 | HOU | P | Ben Mayeaux |
| 3/14/2023 | New Orleans | A | Scott Fiorito |
| 6/12/2024 | NOLA | A | Murphy Foster |

This certificate issued by: J.J. Andrew COR
J.J. ANDREW, CDR, USCG, By direction
Officer in Charge, Marine Inspection
Marine Safety Unit Port Arthur
Inspection Zone

Dept. of Home Sec., USCG, CG-841 (Rev 4-2000)(v2)

OMB No. 2115-0517

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

| | |
|---|---|
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# Certificate of Inspection

Vessel Name: KIRBY 27721

## ---Hull Exams---

| Exam Type | Next Exam | Last Exam | Prior Exam |
|---|---|---|---|
| DryDock | 18Mar2025 | 18Mar2015 | 20Jan2005 |
| Internal Structure | 31Mar2025 | 23Apr2020 | 18Mar2015 |

## --- 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 |
|---|---|---|---|---|---|
| 28484 | 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) |
|---|---|---|
| 1S | 812 | 8.9 |
| 1P | 812 | 8.9 |
| 2S | 810 | 8.9 |
| 2P | 810 | 8.9 |
| 3S | 750 | 8.9 |
| 3P | 750 | 8.9 |

***Loading Constraints - Stability***

| Hull Type | Maximum Load (short tons) | Maximum Draft (ft/in) | Max Density (lbs/gal) | Route Description |
|---|---|---|---|---|
| II | 3526 | 9ft 6in | 8.9 | |
| II | 3526 | 9ft 6in | 8.9 | |
| III | 4521 | 11ft 6in | 8.9 | |
| III | 4521 | 11ft 6in | 8.9 | |

***Conditions Of Carriage***

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #C1-0402352 dated 27 Aug 2004, and Grade "A" and lower cargoes may be carried.

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.

Thermal fluid heater may only be operated when carrying grade "E" cargoes.

*Benzene Prohibition*

Vessel not authorized to carry Benzene or Benzene containing cargoes with a Benzene concentration of 0.5% of more.

*Stability and Trim*

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

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

Per 46 CFR 151.10-15(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.

## --- Inspection Status ---

***Cargo Tanks***

| | Internal Exam | | | External Exam | | |
|---|---|---|---|---|---|---|
| Tank Id | Previous | Last | Next | Previous | Last | Next |
| 1S | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |
| 1P | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |
| 2S | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |
| 2P | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |
| 3S | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |
| 3P | 20Jan2005 | 18Mar2015 | 18Mar2025 | - | - | - |

| | | Hydro Test | | |
|---|---|---|---|---|
| Tank Id | Safety Valves | Previous | Last | Next |
| 1S | 03Apr2020 | - | - | - |
| 1P | 03Apr2020 | - | - | - |
| 2S | 03Apr2020 | - | - | - |
| 2P | 03Apr2020 | - | - | - |
| 3S | 03Apr2020 | - | - | - |
| 3P | 03Apr2020 | - | - | - |

## ---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***

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

Serial #: C1-0402352
Generated: 27-Aug-04

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: **KIRBY 27721**
Official #: 1162078

Shipyard: Trinity Ashland City
Hull #: 4477

### 46 CFR 151 Tank Group Characteristics

| Tank Group Information | | Cargo Identification | | | Hull Typ | Cargo Seg Tank | Tanks | | | Cargo Transfer | | Environmental Control | | Fire Protection Provided | Special Requirements | | Elec Haz | Temp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tnk Grp | Tanks in Group | Density | Press. | Temp. | | | Type | Vent | Gauge | Pipe Class | Cont | Tanks | Handling Space | | General | Materials of Construction | | |
| A | #1 - #3 P/S | 8.91 | Atmos. | Amb. | II | 1ii 2ii | Integral Gravity | PV | Restr. | II | G-1 | NR | NA | Portable | .50-81(a), .50-81(b), .50-86, | 55-1(h), (j), 56-1(a), (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 | | | | | | Conditions of Carriage | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Vapor Recovery | | |
| 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 | O | C | III | A | No | N/A | No |
| Adiponitrile | ADN | 37 | O | E | II | A | No | N/A | No |
| Alkyl(C7-C9) nitrates | AKN | 34 [2] | O | NA | III | A | No | N/A | .50-81, .50-86 |
| Butyl acrylate (all isomers) | BAR | 14 | O | D | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Butyl methacrylate | BMH | 14 | O | D | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Butyraldehyde (all isomers) | BAE | 19 | O | C | III | A | No | N/A | .55-1(h) |
| Camphor oil (light) | CPO | 18 | O | D | II | A | No | N/A | No |
| Chemical Oil (refined, containing phenolics) | COD | 21 | O | E | II | A | No | N/A | .50-73 |
| Coal tar naphtha solvent | NCT | 33 | O | D | III | A | No | N/A | .50-73 |
| Creosote | CCW | 21 [2] | O | E | III | A | No | N/A | No |
| Cresols (all isomers) | CRS | 21 | O | E | III | A | No | N/A | No |
| Crotonaldehyde | CTA | 19 [2] | O | C | II | A | No | N/A | .55-1(h) |
| Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein) | CHG | | O | | III | A | No | N/A | No |
| Ethyl acrylate | EAC | 14 | O | C | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Ethylene cyanohydrin | ETC | 20 | O | E | III | A | No | N/A | No |
| Ethylene glycol hexyl ether | EGH | 40 | O | E | III | A | No | N/A | No |
| Ethylene glycol monoalkyl ethers | EGC | 40 | O | D/E | III | A | No | N/A | No |
| Ethylene glycol propyl ether | EGP | 40 | O | E | III | A | No | N/A | No |
| 2-Ethylhexyl acrylate | EAI | 14 | O | E | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Ethyl methacrylate | ETM | 14 | O | D/E | III | A | No | N/A | .50-70(a) |
| 2-Ethyl-3-propylacrolein | EPA | 19 [2] | O | E | III | A | No | N/A | No |
| Hydrocarbon 5-9 | HFN | | O | | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Isoprene | IPR | 30 | O | A | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Mesityl oxide | MSO | 18 [2] | O | D | III | A | No | N/A | No |
| Methyl acrylate | MAM | 14 | O | C | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Methylcyclopentadiene dimer | MCK | 30 | O | C | III | A | No | N/A | No |
| Methyl methacrylate | MMM | 14 | O | C | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| alpha-Methylstyrene | MSR | 30 | O | D | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| 1- or 2-Nitropropane | NPM | 42 | O | D | III | A | No | N/A | .50-81 |
| 1,3-Pentadiene | PDE | 30 | O | A | III | A | No | N/A | .50-70(a), .50-81 |
| Styrene (crude) | STX | | O | D | III | A | No | N/A | No |
| Styrene monomer | STY | 30 | O | D | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Tetrahydrofuran | THF | 41 | O | C | III | A | No | N/A | .50-70(b) |
| Trisodium phosphate solution | TSP | 5 | O | NA | III | A | No | N/A | .50-73, .56-1(a), (c). |
| Vinyl acetate | VAM | 13 | O | C | III | A | No | N/A | .50-70(a), .50-81(a), (b) |
| Vinyl neodecanate | VND | 13 | O | E | III | A | No | N/A | .50-70(a), .50-81(a), (b) |

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

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# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: **KIRBY 27721**
Official #: 1162078



Shipyard: Trinity Ashland City
Hull #: 4477

| Cargo Identification | | | | | | Conditions of Carriage | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Vapor Recovery | | |
| 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 |

*** *This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection.* ***

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

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# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: **KIRBY 27721**
Official #: 1162078



Shipyard: Trinity Ashland
Hull #: 4477

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

**Cargo Identificatio**

| | |
|---|---|
| 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 | The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual. |
| none | 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 (G-MSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Telephone (202) 267-1217. |
| Note 2 | See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart. |
| Subchapter | The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified. |
| Subchapter D | Those flammable and combustible liquids listed in 46 CFR Table 30.25-1. |
| 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. |
| Grade | The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo. |
| A, B, C | Flammable liquid cargoes, as defined in 46 CFR 30-10.22. |
| D, E | 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. |
| 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. |
| I | 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). |
| II | 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 | 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**

| | |
|---|---|
| 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.<br>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 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.<br>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 |
| 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. |
| none | The cargo has not been evaluated/classified for use in vapor control systems. |