



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

Certification Date: 18 Sep 2019
Expiration Date: 18 Sep 2024

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation VI14, for a SAFE MANNING DOCUMENT

| Vessel Name | Official Number | IMO Number | Call Sign | Service |
|-------------|-----------------|------------|-----------|------------|
| KIRBY 28106 | 1218324 | | | Tank Barge |

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

| Place Built | Delivery Date | Keel Laid Date | Gross Tons | Net Tons | DWT | Length |
|------------------|---------------|----------------|------------|----------|-----|---------|
| ASHLAND CITY, TN | 07Jul2009 | 22Apr2009 | R-1632 | R-1632 | | R-300 0 |
| UNITED STATES | | | | | | |

| Owner | Operator |
|--|--|
| KIRBY INLAND MARINE LP 55 WAUGH DR STE 1000 HOUSTON, TX 77007 UNITED STATES | KIRBY INLAND MARINE, LP 18350 MARKET STREET 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 Lifboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

| | | | |
|----------------------------|----------------------|------------------------------|----------|
| 0 Masters | 0 Licensed Mates | 0 Chief Engineers | 0 Others |
| 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 plus Limited Coastwise---

Also, 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 per 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 OCHI notified in writing as soon as this change in status occurs.

This tank barge is participating in the Eighth Coast Guard District's Tank Barge Streamlined Inspection Program

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 | | | | This certificate issued by: J.J. ANDREW, CDR, USCG, By direction |
|-------------------------------|-------------|------|-----------------|--|
| Date | Zone | AP/R | Signature | |
| 9-16-20 | HOU/GAL | A | DANNY MURRAY | Officer in Charge, Marine Inspection Marine Safety Unit Port Arthur |
| 10-4-21 | HOU | P | REN MAY CAUX | |
| 6-21-2022 | NOLA | H | MURPHY, BRADLEY | |
| 12-4-2023 | COAST GUARD | A | OSHIKAWA, RYUJI | |
| Inspection Zone | | | | |



Certificate of Inspection

Vessel Name: KIRBY 28106

(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 OCMH Houston-Galveston.

---Hull Exams---

| Exam Type | Next Exam | Last Exam | Prior Exam |
|--------------------|-----------|-----------|------------|
| DryDock | 31Jul2029 | 18Sep2019 | 07Jul2009 |
| Internal Structure | 30Sep2024 | 18Sep2019 | 12Sep2014 |

--- 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 |
|----------------|---------|--------------------|-------------------|-------------------|-------------------|
| 28500 | Barrels | A | Yes | No | No |

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

| Tank Location Description | Max Cargo Weight per Tank (short tons) | Maximum Density (lbs/gal) |
|---------------------------|--|---------------------------|
| 1 P/S | 838 | 8.74 |
| 2 P/S | 843 | 8.74 |
| 3 P/S | 777 | 8.74 |

Loading Constraints - Stability

| Hull Type | Maximum Load (short tons) | Maximum Draft (ft/in) | Max Density (lbs/gal) | Route Description |
|-----------|---------------------------|-----------------------|-----------------------|-------------------|
| II | 3804 | 10ft 0in | 13.6 | R, LBS |
| III | 4680 | 11ft 9in | 13.6 | R, LBS |

Conditions Of Carriage

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial # C1-0901515, dated 15-May-09, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

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

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

Vapor Control Authorization

Per 46 CFR 39, excluding Part 39.40, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter serial # C1-0901515, dated May-15-2009, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Stability and Trim

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

Per 46 CFR 151.10(c)(2), the maximum tank weights listed above reflect uniform (within 5%) loading at the deepest draft



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allowed. When carrying Subchapter "O" cargoes at shallower drafts, the barge should always be loaded uniformly.

--- Inspection Status ---

Cargo Tanks

| Tank Id | Internal Exam | | | External Exam | | |
|---------|---------------|-----------|-----------|---------------|------|------|
| | Previous | Last | Next | Previous | Last | Next |
| 1 P/S | 07Jul2009 | 18Sep2019 | 31Jul2029 | - | - | - |
| 2 P/S | 07Jul2009 | 18Sep2019 | 31Jul2029 | - | - | - |
| 3 P/S | 07Jul2009 | 18Sep2019 | 31Jul2029 | - | - | - |

Hydro Test

| Tank Id | Safety Valves | Hydro Test | | |
|---------|---------------|------------|------|------|
| | | 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 |

END



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: **TRINITY ASHLAND CITY**

Official #: **1219324**

Hull #: **4618**

46 CFR 151 Tank Group Characteristics

| Tank Group Information | | Cargo Identification | | | Hull Type | Cargo Seg Tank | Tanks | | | Cargo Transfer | | Environmental Control | | Fire Protection Provided | Special Requirements | | Elec Haz | Temp Cont |
|------------------------|---------------------|----------------------|--------|-------|-----------|----------------|------------------|------|--------|----------------|------|-----------------------|----------------|--------------------------|--|---|----------|-----------|
| Tnk Grp | Tanks in Group | Density | Press. | Temp. | | | Type | Vent | Gauge | Pipe Class | Cont | Tanks | Handling Space | | General | Materials of Construction | | |
| A | #1P/S, #2P/S, #3P/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), (h), (j), 56-1(a), (b), (c), (d), (e), (f), (g) | NR | No |

- Notes: 1. Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.
2. Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.
3. Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|----------------------|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |

Authorized Subchapter O Cargoes

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

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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: TRINITY ASHLAND
CITY

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|--|---------------|------------------|-------------|-------|-----------|--------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code IAI | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group A | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'ls of 50-70(a), 50-81(a), (b), 55-1(c) | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| iso-Decyl acrylate | | | | | | | | | | | |
| Dichlorobenzene (all isomers) | DBX | 36 | O | E | III | A | Yes | 3 | .56-1(a), (b) | G | |
| 1,1-Dichloroethane | DCH | 36 | O | C | III | A | Yes | 1 | No | G | |
| 2,2'-Dichloroethyl ether | DEE | 41 | O | D | II | A | Yes | 1 | .55-1(f) | G | |
| Dichloromethane | DCM | 36 | O | NA | III | A | Yes | 5 | No | G | |
| 2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution | DDE | 43 | O | E | III | A | No | N/A | .56-1(a), (b), (c), (g) | G | |
| 2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution | DAD | 0 ^{1,2} | O | A | III | A | No | N/A | .56-1(a), (b), (c), (g) | G | |
| 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution | DTI | 43 ² | O | E | III | A | No | N/A | .56-1(a), (b), (c), (g) | G | |
| 1,1-Dichloropropane | DPB | 36 | O | C | III | A | Yes | 3 | No | G | |
| 1,2-Dichloropropane | DPP | 36 | O | C | III | A | Yes | 3 | No | G | |
| 1,3-Dichloropropane | DPC | 36 | O | C | III | A | Yes | 3 | No | G | |
| 1,3-Dichloropropene | DPU | 15 | O | D | II | A | Yes | 4 | No | G | |
| Dichloropropene, Dichloropropane mixtures | DMX | 15 | O | C | II | A | Yes | 1 | No | G | |
| Diethanolamine | DEA | 8 | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| Diethylamine | DEN | 7 | O | C | III | A | Yes | 3 | .55-1(c) | G | |
| Diethylenetriamine | DET | 7 ² | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| Diisobutylamine | DBU | 7 | O | D | III | A | Yes | 3 | .55-1(c) | G | |
| Diisopropanolamine | DIP | 8 | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| Diisopropylamine | DIA | 7 | O | C | II | A | Yes | 3 | .55-1(c) | G | |
| N,N-Dimethylacetamide | DAC | 10 | O | E | III | A | Yes | 3 | .56-1(b) | G | |
| Dimethylethanolamine | DMB | 8 | O | D | III | A | Yes | 1 | .56-1(b), (c) | G | |
| Dimethylformamide | DMF | 10 | O | D | III | A | Yes | 1 | .55-1(e) | G | |
| Di-n-propylamine | DNA | 7 | O | C | II | A | Yes | 3 | .55-1(c) | G | |
| Dodecyl dimethylamine, Tetradecyldimethylamine mixture | DOT | 7 | O | E | III | A | No | N/A | .56-1(b) | G | |
| Dodecyl diphenyl ether disulfonate solution | DOS | 43 | O | # | II | A | No | N/A | No | G | |
| EE Glycol Ether Mixture | EEG | 40 | O | D | III | A | No | N/A | No | G | |
| Ethanolamine | MEA | 8 | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| Ethyl acrylate | EAC | 14 | O | C | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Ethylamine solution (72% or less) | EAN | 7 | O | A | II | A | Yes | 6 | .55-1(b) | G | |
| N-Ethylbutylamine | EBA | 7 | O | D | III | A | Yes | 3 | .55-1(b) | G | |
| N-Ethylcyclohexylamine | ECC | 7 | O | D | III | A | Yes | 1 | .55-1(b) | G | |
| Ethylene cyanohydrin | ETC | 20 | O | E | III | A | Yes | 1 | No | G | |
| Ethylenediamine | EDA | 7 ² | O | D | III | A | Yes | 1 | .55-1(c) | G | |
| Ethylene dichloride | EDC | 36 ² | O | C | III | A | Yes | 1 | No | G | |
| Ethylene glycol hexyl ether | EGH | 40 | O | E | III | A | No | N/A | No | G | |
| Ethylene glycol monoalkyl ethers | EGC | 40 | O | D/E | III | A | Yes | 1 | No | G | |
| Ethylene glycol propyl ether | EGP | 40 | O | E | III | A | Yes | 1 | No | G | |
| 2-Ethylhexyl acrylate | EAI | 14 | O | E | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Ethyl methacrylate | ETM | 14 | O | D/E | III | A | Yes | 2 | .50-70(a) | G | |
| 2-Ethyl-3-propylacrolein | EPA | 19 ² | O | E | III | A | Yes | 1 | No | G | |
| Formaldehyde solution (37% to 50%) | FMS | 19 ² | O | D/E | III | A | Yes | 1 | .55-1(h) | G | |
| Furfural | FFA | 19 | O | D | III | A | Yes | 1 | .55-1(h) | G | |
| Glutaraldehyde solution (50% or less) | GTA | 19 | O | NA | III | A | No | N/A | No | G | |
| Hexamethylenediamine solution | HMC | 7 | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| Hexamethylenimine | HMI | 7 | O | C | II | A | Yes | 1 | .56-1(b), (c) | G | |
| Hydrocarbon 5-9 | HFN | | O | C | III | A | Yes | 1 | .50-70(a), .50-81(a), (b) | G | |
| Isoprene | IPR | 30 | O | A | III | A | Yes | 7 | .50-70(a), .50-81(a), (b) | G | |
| Isoprene, Pentadiene mixture | IPN | | O | B | III | A | No | N/A | .50-70(a), .55-1(c) | G | |
| Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor) | KPL | 5 | O | NA | III | A | No | N/A | .50-73, .56-1(a), (c), (g) | G | |
| Mesityl oxide | MSO | 18 ² | O | D | III | A | Yes | 1 | No | G | |

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Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: **TRINITY ASHLAND CITY**

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|------------------|-------------|-------|-----------|------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of 50-70(a), 50-81(a), (b) | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| Methyl acrylate | MAM | 14 | O | C | III | A | Yes | 2 | No | G | |
| Methylcyclopentadiene dimer | MCK | 30 | O | C | III | A | Yes | 1 | .56-1(b), (c) | G | |
| Methyl diethanolamine | MDE | 8 | O | E | III | A | Yes | 1 | .55-1(e) | G | |
| 2-Methyl-5-ethylpyridine | MEP | 9 | O | E | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Methyl methacrylate | MMM | 14 | O | C | III | A | Yes | 3 | .55-1(c) | G | |
| 2-Methylpyridine | MPR | 9 | O | D | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| alpha-Methylstyrene | MSR | 30 | O | D | III | A | Yes | 1 | .55-1(c) | G | |
| Morpholine | MPL | 7 ² | O | D | III | A | Yes | 1 | .50-81 | G | |
| 1- or 2-Nitropropane | NPM | 42 | O | D | III | A | Yes | 7 | .50-70(a), .50-81 | G | |
| 1,3-Pentadiene | PDE | 30 | O | A | III | A | Yes | 1 | No | G | |
| Perchloroethylene | PER | 36 | O | NA | III | A | No | N/A | .55-1(e) | G | |
| Polyethylene polyamines | PEB | 7 ² | O | E | III | A | Yes | 1 | .55-1(c) | G | |
| iso-Propanolamine | MPA | 8 | O | E | III | A | Yes | 1 | .56-1(b), (c) | G | |
| Propanolamine (iso-, n-) | PAX | 8 | O | E | III | A | Yes | 5 | .55-1(c) | G | |
| iso-Propylamine | IPP | 7 | O | A | II | A | Yes | 1 | .55-1(e) | G | |
| Pyridine | PRD | 9 | O | C | III | A | Yes | 1 | .50-73, .55-1(j) | G | |
| Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide) | SAP | | O | | III | A | No | N/A | .50-73, .56-1(a), (b), (c) | G | |
| Sodium aluminate solution (45% or less) | SAU | 5 | O | NA | III | A | No | N/A | .50-73 | G | |
| Sodium chlorate solution (50% or less) | SDD | 0 ^{1,2} | O | NA | III | A | No | N/A | .50-73, .56-1(a), (b) | G | |
| Sodium hypochlorite solution (20% or less) | SHQ | 5 | O | NA | III | A | No | N/A | .50-73, .55-1(b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less) | SSH | 0 ^{1,2} | O | NA | III | A | Yes | 1 | .50-73, .55-1(b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm) | SSI | 0 ^{1,2} | O | NA | III | A | No | N/A | .50-73, .55-1(b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm) | SSJ | 0 ^{1,2} | O | NA | II | A | No | N/A | .50-73, .55-1(b) | G | |
| Styrene (crude) | STX | | O | D | III | A | Yes | 2 | No | G | |
| Styrene monomer | STY | 30 | O | D | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| 1,1,2,2-Tetrachloroethane | TEC | 36 | O | NA | III | A | No | N/A | .55-1(c) | G | |
| Tetraethylenepentamine | TTP | 7 | O | E | III | A | Yes | 1 | .50-70(b) | G | |
| Tetrahydrofuran | THF | 41 | O | C | III | A | Yes | 1 | .50-73, .56-1(a), (b), (c), (g) | G | |
| Toluenediamine | TDA | 9 | O | E | II | A | No | N/A | No | G | |
| 1,2,4-Trichlorobenzene | TCB | 36 | O | E | III | A | Yes | 1 | .50-73, .56-1(a) | G | |
| 1,1,2-Trichloroethane | TCM | 36 | O | NA | III | A | Yes | 1 | No | G | |
| Trichloroethylene | TCL | 36 ² | O | NA | III | A | Yes | 3 | .50-73, .56-1(a) | G | |
| 1,2,3-Trichloropropane | TCN | 36 | O | E | II | A | Yes | 1 | .55-1(b) | G | |
| Triethanolamine | TEA | 8 ² | O | E | III | A | Yes | 3 | .55-1(e) | G | |
| Triethylamine | TEN | 7 | O | C | II | A | Yes | 1 | .55-1(b) | G | |
| Triethylenetetramine | TET | 7 ² | O | E | III | A | Yes | 1 | .56-1(a), (b), (c) | G | |
| Triphenylborane (10% or less), caustic soda solution | TPB | 5 | O | NA | III | A | No | N/A | .50-73, .56-1(a), (c) | G | |
| Trisodium phosphate solution | TSP | 5 | O | NA | III | A | No | N/A | .56-1(b) | G | |
| Urea, Ammonium nitrate solution (containing more than 2% NH3) | UAS | 6 | O | NA | III | A | No | N/A | .50-73, .56-1(a), (c), (g) | G | |
| Vanillin black liquor (free alkali content, 3% or more). | VBL | 5 | O | NA | III | A | No | N/A | .50-70(a), .50-81(a), (b) | G | |
| Vinyl acetate | VAM | 13 | O | C | III | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Vinyl neodecanate | VND | 13 | O | E | III | A | No | N/A | .50-70(a), .50-81(a), (b) | G | |
| Vinyltoluene | VNT | 13 | O | D | III | A | Yes | 2 | .50-70(a), .50-81, .56-1(a), (b), (c), (| G | |

Subchapter D Cargoes Authorized for Vapor Control

| | | | | | | | | | | |
|--|-----|-----------------|---|---|--|---|-----|---|--|--|
| Acetone | ACT | 18 ² | D | C | | A | Yes | 1 | | |
| Acetophenone | ACP | 18 | D | E | | A | Yes | 1 | | |
| Alcohol(C12-C16) poly(1-6)ethoxylates | APU | 20 | D | E | | A | Yes | 1 | | |
| Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates | AEB | 20 | D | E | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: TRINITY ASHLAND
CITY

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| Amyl acetate (all isomers) | AAI | 20 | D | D | | A | Yes | 1 | | | |
| Amyl alcohol (iso-, n-, sec-, primary) | AAI | 20 | D | D | | A | Yes | 1 | | | |
| Benzyl alcohol | BAL | 21 | D | E | | A | 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 | | A | Yes | 1 | | | |
| Butyl alcohol (iso-) | IAL | 20 ² | D | D | | A | Yes | 1 | | | |
| Butyl alcohol (n-) | BAN | | D | D | | A | Yes | 1 | | | |
| Butyl alcohol (sec-) | BAS | | D | C | | A | Yes | 1 | | | |
| Butyl alcohol (tert-) | BAT | | D | C | | A | Yes | 1 | | | |
| Butyl benzyl phthalate | BPH | 34 | D | E | | A | Yes | 1 | | | |
| Butyl toluene | BUE | 32 | D | D | | A | Yes | 1 | | | |
| Caprolactam solutions | CLS | 22 | D | E | | A | Yes | 1 | | | |
| Cyclohexane | CHX | 31 | D | C | | A | Yes | 1 | | | |
| Cyclohexanol | CHN | 20 | D | E | | A | Yes | 1 | | | |
| 1,3-Cyclopentadiene dimer (molten) | CPD | 30 | D | D/E | | A | 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 | 1 | | | |
| Decene | DCE | 30 | D | D | | A | Yes | 1 | | | |
| Decyl alcohol (all isomers) | DAX | 20 ² | D | E | | A | Yes | 1 | | | |
| n-Decylbenzene, see Alkyl(C9+)benzenes | DBZ | 32 | D | E | | A | Yes | 1 | | | |
| Diacetone alcohol | DAA | 20 ² | D | D | | A | Yes | 1 | | | |
| ortho-Dibutyl phthalate | DPA | 34 | D | E | | A | Yes | 1 | | | |
| Diethylbenzene | DEB | 32 | D | D | | A | Yes | 1 | | | |
| Diethylene glycol | DEG | 40 ² | D | E | | A | Yes | 1 | | | |
| Diisobutylene | DBL | 30 | D | C | | A | 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 | | | |
| Diocetyl 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 | E | | A | Yes | 1 | | | |
| Distillates: Straight run | DSR | 33 | D | E | | A | 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 ² | D | C | | A | Yes | 1 | | | |
| Ethylbenzene | ETB | 32 | D | C | | 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 | | | |

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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: TRINITY ASHLAND
 CITY

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| Ethylene glycol | EGL | 20 ² | 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 ² | D | E | | A | Yes | 1 | | | |
| Gasoline blending stocks: Alkylates | GAK | 33 | D | A/C | | A | Yes | 1 | | | |
| Gasoline blending stocks: Reformates | GRF | 33 | D | A/C | | A | Yes | 1 | | | |
| Gasolines: Automotive (containing not over 4.23 grams lead per gallon) | GAT | 33 | D | C | | A | Yes | 1 | | | |
| Gasolines: Aviation (containing not over 4.86 grams of lead per gallon) | GAV | 33 | D | C | | A | Yes | 1 | | | |
| Gasolines: Casinghead (natural) | GCS | 33 | D | A/C | | A | Yes | 1 | | | |
| Gasolines: Polymer | GPL | 33 | D | A/C | | A | Yes | 1 | | | |
| Gasolines: Straight run | GSR | 33 | D | A/C | | A | Yes | 1 | | | |
| Glycerine | GCR | 20 ² | D | E | | A | Yes | 1 | | | |
| Heptane (all isomers), see Alkanes (C6-C9) (all isomers) | HMX | 31 | D | C | | A | Yes | 1 | | | |
| Heptanoic acid | HEP | 4 | D | E | | A | Yes | 1 | | | |
| Heptanol (all isomers) | HTX | 20 | D | D/E | | A | Yes | 1 | | | |
| Heptene (all isomers) | HPX | 30 | D | C | | A | Yes | 2 | | | |
| Heptyl acetate | HPE | 34 | D | E | | A | Yes | 1 | | | |
| Hexane (all isomers), see Alkanes (C6-C9) | HXS | 31 ² | D | B/C | | A | Yes | 1 | | | |
| Hexanoic acid | HXO | 4 | D | E | | A | Yes | 1 | | | |
| Hexanol | HXN | 20 | D | D | | A | Yes | 1 | | | |
| Hexene (all isomers) | HEX | 30 | D | C | | A | Yes | 2 | | | |
| Hexylene glycol | HXG | 20 | D | E | | A | Yes | 1 | | | |
| Isophorone | IPH | 18 ² | D | E | | A | Yes | 1 | | | |
| Jet fuel: JP-4 | JPF | 33 | D | E | | A | Yes | 1 | | | |
| Jet fuel: JP-5 (kerosene, heavy) | JPV | 33 | D | D | | A | Yes | 1 | | | |
| Kerosene | KRS | 33 | D | D | | A | Yes | 1 | | | |
| Methyl acetate | MTT | 34 | D | D | | A | Yes | 1 | | | |
| Methyl alcohol | MAL | 20 ² | D | C | | A | Yes | 1 | | | |
| Methylamyl acetate | MAC | 34 | D | D | | A | Yes | 1 | | | |
| Methylamyl alcohol | MAA | 20 | D | D | | A | Yes | 1 | | | |
| Methyl amyl ketone | MAK | 18 | D | D | | A | Yes | 1 | | | |
| Methyl tert-butyl ether | MBE | 41 ² | D | 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 | 18 ² | D | C | | A | Yes | 1 | | | |
| Methyl heptyl ketone | MHK | 18 | D | D | | A | Yes | 1 | | | |
| Methyl isobutyl ketone | MIK | 18 ² | D | C | | A | Yes | 1 | | | |
| Methyl naphthalene (molten) | MNA | 32 | D | E | | A | Yes | 1 | | | |
| Mineral spirits | MNS | 33 | D | D | | A | Yes | 1 | | | |
| Myrcene | MRE | 30 | D | D | | A | Yes | 1 | | | |
| Naphtha: Heavy | NAG | 33 | D | # | | A | Yes | 1 | | | |
| Naphtha: Petroleum | PTN | 33 | D | # | | A | Yes | 1 | | | |
| Naphtha: Solvent | NSV | 33 | D | D | | A | Yes | 1 | | | |

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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: TRINITY ASHLAND
CITY

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|---|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| Naphtha: Stoddard solvent | NSS | 33 | D | D | | A | Yes | 1 | | | |
| Naphtha: Varnish makers and painters (75%) | NVM | 33 | D | C | | A | Yes | 1 | | | |
| Nonane (all isomers), see Alkanes (C6-C9) | NAX | 31 | D | D | | A | Yes | 1 | | | |
| Nonene (all isomers) | NON | 30 | D | D | | A | Yes | 2 | | | |
| Nonyl alcohol (all isomers) | NNS | 20 ² | D | E | | A | Yes | 1 | | | |
| Nonyl phenol | NNP | 21 | D | E | | A | Yes | 1 | | | |
| Nonyl phenol poly(4+)ethoxylates | NPE | 40 | D | E | | A | Yes | 1 | | | |
| Octane (all isomers), see Alkanes (C6-C9) | OAX | 31 | D | C | | A | Yes | 1 | | | |
| Octanoic acid (all isomers) | OAY | 4 | D | E | | A | Yes | 1 | | | |
| Octanol (all isomers) | OCX | 20 ² | D | E | | A | Yes | 1 | | | |
| Octene (all isomers) | OTX | 30 | D | C | | A | Yes | 2 | | | |
| Oil, fuel: No. 2 | OTW | 33 | D | D/E | | A | Yes | 1 | | | |
| Oil, fuel: No. 2-D | OTD | 33 | D | D | | A | Yes | 1 | | | |
| Oil, fuel: No. 4 | OFR | 33 | D | D/E | | A | Yes | 1 | | | |
| Oil, fuel: No. 5 | OFV | 33 | D | D/E | | A | Yes | 1 | | | |
| Oil, fuel: No. 6 | OSX | 33 | D | E | | A | Yes | 1 | | | |
| Oil, misc: Crude | OIL | 33 | D | C/D | | A | Yes | 1 | | | |
| Oil, misc: Diesel | ODS | 33 | D | D/E | | A | Yes | 1 | | | |
| Oil, misc: Gas, high pour | OGP | 33 | D | E | | A | Yes | 1 | | | |
| Oil, misc: Lubricating | OLB | 33 | D | E | | A | Yes | 1 | | | |
| Oil, misc: Residual | ORL | 33 | D | E | | A | Yes | 1 | | | |
| Oil, misc: Turbine | OTB | 33 | D | E | | A | Yes | 1 | | | |
| Pentane (all isomers) | PTY | 31 | D | A | | A | Yes | 5 | | | |
| Pentene (all isomers) | PTX | 30 | D | A | | A | Yes | 5 | | | |
| alpha-Pinene | PIO | 30 | D | D | | A | Yes | 1 | | | |
| beta-Pinene | PIP | 30 | D | D | | A | Yes | 1 | | | |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether | PAG | 40 | D | E | | A | Yes | 1 | | | |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate | PAF | 34 | D | E | | A | Yes | 1 | | | |
| Polybutene | PLB | 30 | D | E | | A | Yes | 1 | | | |
| Polypropylene glycol | PGC | 40 | D | E | | A | Yes | 1 | | | |
| iso-Propyl acetate | IAC | 34 | D | C | | A | Yes | 1 | | | |
| n-Propyl acetate | PAT | 34 | D | C | | A | Yes | 1 | | | |
| iso-Propyl alcohol | IPA | 20 ² | D | C | | A | Yes | 1 | | | |
| n-Propyl alcohol | PAL | 20 ² | D | C | | A | Yes | 1 | | | |
| Propylbenzene (all isomers) | PBY | 32 | D | D | | A | Yes | 1 | | | |
| iso-Propylcyclohexane | IPX | 31 | D | D | | A | Yes | 1 | | | |
| Propylene glycol | PPG | 20 ² | D | E | | A | Yes | 1 | | | |
| Propylene glycol methyl ether acetate | PGN | 34 | D | D | | A | Yes | 1 | | | |
| Propylene tetramer | PTT | 30 | D | D | | A | Yes | 1 | | | |
| Sulfolane | SFL | 39 | D | E | | A | Yes | 1 | | | |
| Tetraethylene glycol | TTG | 40 | D | E | | A | Yes | 1 | | | |
| Tetrahydronaphthalene | THN | 32 | D | E | | A | Yes | 1 | | | |
| Toluene | TOL | 32 | D | C | | A | Yes | 1 | | | |
| Tricresyl phosphate (less than 1% of the ortho isomer) | TCP | 34 | D | E | | A | 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 | | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: TRINITY ASHLAND
 CITY

Official #: 1219324

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Hull #: 4618

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|--------------------------------|-----------|-----------------|-------------|-------|-----------|------------------------|----------------|--------------|---|--------------|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of | Insp. Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| 1-Undecyl alcohol | UND | 20 | D | E | | A | Yes | 1 | | |
| Xylenes (ortho-, meta-, para-) | XLX | 32 | D | D | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 28106**

Shipyard: **TRINITY ASHL**

Official #: **1219324**

Page 8 of 8

Hull #: **4618**

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. |
| Compatibility 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 (202) 372-1425. |
| Note 2 | See Appendix I to 46 CFR Part 150 - exceptions to the compatibility chart. |
| 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. |
| 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 I II III 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 sufficient 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 | (Polymers) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety components and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation 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 | (Polymers 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. |
| none | The cargo has not been evaluated/classified for use in vapor control systems. |

U.S. Department of
Homeland Security

United States
Coast Guard



Commandant
United States Coast Guard

2703 Martin Luther King, Jr. Ave S.E.
STOP 7509
Washington, DC 20593-7509
Staff Symbol: CG-ENG-5
Phone: (202) 372-1418
Fax: (202) 372-8380
Email: Jodi.j.min@uscg.mil

16703/46-39/2014-471
16JUN2014

Mr. Ashraf Degedy
Design Associates, Inc.
1508 Gause Blvd., Suite 203-206
Slidell, LA 70460

Subj: MULTI-BREASTED TANDEM LOADING UNDER VAPOR CONTROL FOR KIRBY
CORPORATION BARGES AT RE-CERTIFIED FACILITIES

Ref: (a) USCG Commandant (CG-ENG-5) letter 16703/46-39/2014-364 dated May 15, 2014

Dear Mr. Degedy:

This letter is in response to your email dated June 1, 2014, which requested my approval to allow Kirby Corporation barges to perform multi-breasted dual barge loading under vapor control at 24 facilities. Per reference (a), the barges listed in enclosure (1) are acceptable by the U. S. Coast Guard Marine Safety Center (MSC) for conducting multi-breasted tandem loading operations at a specified maximum transfer rate and certain conditions.

Per our records, the 24 facilities listed below are approved for conducting multi-breasted tandem loading under vapor control:

| Approved Facilities | Location |
|--|-----------------------|
| Motiva Norco | Norco, LA |
| Marquis Energy | Caruthersville, MO |
| Shell Oil (East, Center, and West Docks) | Deer Park, TX |
| Total | Port Arthur, TX |
| Phillips 66 (previously Conoco Phillips), (Berths 2BE, 2BW, 3) | Westlake, LA |
| Sunoco Logistics Facility | Nederland, TX |
| Texas International Terminals | Galveston, TX |
| Chevron Beaumont Terminal | Nederland, TX |
| Valero, St. Charles Refinery | Norco, LA |
| International Matex Tank Terminals | St. Rose, LA |
| NuStar | Corpus Christi, TX |
| GulfMark Energy | Victoria, TX |
| Marathon Galveston Bay Refinery (previously BP Products North America, Inc.) (Docks 32N, 32S, 33, 34, 37, 38) | Texas City, TX |
| Motiva | Port Arthur, TX |
| Calcasieu Refining Company | Lake Charles, LA |
| Nustar | St. James, LA |
| Enterprise Products, Morgan's Point Terminal | La Porte, TX |
| Plains Marketing, L.P. | Corpus Christi, TX |

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| | |
|---|--------------------|
| GT Logistics, Taylor Barge Dock 1 & 2 | Port Arthur, TX |
| CITGO | Corpus Christi, TX |
| CITGO | Lake Charles, LA |
| Crosstex (Mermentau King Dock) | Jennings, LA |
| Valero (Oil Docks 3, 4, 7, 11) | Corpus Christi, TX |
| Oiltanking Beaumont (B Dock and South Dock) | Beaumont, TX |

The Kirby barges listed in enclosure (1) are hereby approved for conducting multi-breasted tandem loading under vapor control at the 24 facilities listed above, subject to the following 12 conditions:

- a. Such loading operations of these barges shall be limited to loading of cargoes listed on each of the two barge's Cargo Authority Attachment (CAA) and simultaneously on the facility's marine VCS certifying letters where the loading operation will be conducted. The maximum cargo transfer rate during tandem loading shall be as specified by the MSC in their dual barge loading approval letter for these barges.
- b. Such loading operations in the same evolution shall be limited to no more than two of the barges approved, and shall be in accordance with any additional conditions imposed by the Coast Guard MSC in their multi-breasted tandem loading operation approval letter for these barges.
- c. Such operations shall only be conducted at the facilities specified above. The VCSs at the 24 facilities have been recertified by a Coast Guard accepted facility VCS certifying entity for the operation.
- d. While conducting multi-breasted tandem loading operations, the vapor header on the inboard barge must be in alignment with the vapor header on the outboard barge. The diameter of the vapor header on the inboard barge must be at least as large as the diameter of the largest vapor header on the outboard barge. The vapor headers must be marked in accordance with the requirements of 46 CFR part 39.2001(h). The vapor header and its flanges must meet all applicable requirements of 46 CFR part 39 for vapor headers and flanges. The vapor connection flange on each vapor crossover header must have a stud permanently attached in accordance with the requirements of 46 CFR part 39.2001(j).
- e. The diameter of the vapor crossover hose must be at least as large as the diameter of the largest vapor header on the outboard barge. The length of the vapor crossover hose must not exceed 25 feet between the two barges. The crossover vapor hose must meet the requirements of 46 CFR part 39.2001(i) and be marked in accordance with the requirements of 46 CFR part 39.2001(h).
- f. The cargo transfer procedures shall reflect the proper alignment of a facility VCS to the vapor collection system on the inboard and outboard barges. Similarly, the cargo transfer procedures shall include procedures for disconnecting the facility VCS from both barges. These transfer procedures shall also address the proper connection of the facility VCS alarm/shutdown system to the alarm/shutdown systems of the barges being loaded. A copy of this letter shall be attached to the barge transfer procedures.

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- g. Each cargo tank on both barges must be equipped with a liquid overfill protection system that meets the requirements of 46 CFR part 39.2009. Each cargo tank on both barges also must be equipped with either sight glasses with gauge trees or sight glasses and stick gauges, which indicate when the cargo level in each tank is within one meter of the deck.**
- h. Both barges must be fitted with mated transverse cargo and vapor manifolds, which are in alignment and are at least as large as the vapor line.**
- i. Each barge must have a licensed tankerman to act as the person in charge (PIC) who is trained and familiar with dual barge loading operations. The barge PICs must maintain constant communication with each other and with the facility PIC throughout the transfer operation via a portable radio which meets the requirements of 33 CFR part 155.785.**
- j. The principles for controlling arcing during barge-to-barge transfer are similar to those associated with barge-to-shore transfer. Electric currents must be controlled in accordance with Section 11.9 of the OCIMF publication, "International Safety Guide for Oil Tankers and Terminals (ISGOTT) Fifth Edition." Accordingly, either an insulating flange or a single length of non-conducting hose shall be installed between the barges during vapor transfer. If an insulating flange is used, it shall be connected to the vapor header on the inboard barge. This insulating flange or non-conducting hose shall be in addition to the insulating requirements for the barge-to-shore transfer connection.**
- k. If multi-breasted tandem loading will be conducted using more than one liquid transfer hose from the shore facility, the facility must be capable of activating the emergency shutdown system required by 33 CFR part 154.550. This shall stop the cargo flow to each transfer hose simultaneously in the event an emergency condition occurs that closes the remotely operated cargo vapor shutoff valve in the facility's vapor control system. Multi-breasted tandem loading using more than one liquid transfer hose from the shore facility is prohibited unless the shore facility can comply with this requirement.**
- l. Kirby Corp. shall contact the local Coast Guard Captain of the Port (COTP) in whose zone the loading facilities are located, to ascertain if there is any additional operational requirement for this type of loading operation. Any additional requirement imposed by the local COTP along with the conditions of operation described in this letter, shall be incorporated in the vessel transfer procedures for each barge listed in this letter.**

Kirby Corp. shall provide a copy of this letter to each of the 24 facilities listed in this letter. If you have any questions concerning this matter, please contact LT Jodi Min, of my staff at (202) 372-1418, e-mail: Jodi.j.min@uscg.mil.

Sincerely,



P. A. Keffler
Acting Chief, Hazardous Materials Division
By direction of the Commandant

Enclosure: (1) List of applicable barges

16703/46-39/2014-471
16JUN2014

**Subj: MULTI-BREASTED TANDEM LOADING UNDER VAPOR CONTROL FOR KIRBY
CORPORATION BARGES AT RE-CERTIFIED FACILITIES**

**Copy: Sector Houston-Galveston
Sector Corpus Christi
Sector Lower Mississippi River
Sector New Orleans
MSU Lake Charles
MSU Port Arthur
MSC, Tank Vessel and Offshore Division
CG-FAC-2**

List of Applicable Kirby Barges

- (a) Per USCG MSC letter 16710/P014600, Serial C2-0900031 dated January 8, 2009, the following Kirby barges are accepted by the U.S. Coast Guard (USCG) Marine Safety Center (MSC) for dual barge loading operations under conditions as specified.

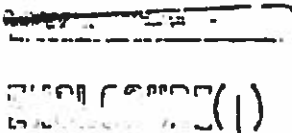
| | Vessel Name | Official No. | Yard and Hull No. |
|----|-------------|--------------|--|
| 1 | KIRBY 28021 | ON 1123986 | West Gulf Marine Hull 125 |
| 2 | KIRBY 28022 | ON 1123991 | West Gulf Marine Hull 126 |
| 3 | KIRBY 28023 | ON 1123992 | West Gulf Marine Hull 127 |
| 4 | KIRBY 28024 | ON 1123993 | West Gulf Marine Hull 128 |
| 5 | KIRBY 28073 | ON 1183295 | Trinity Marine, Ashland City Hull 4514 |
| 6 | KIRBY 28074 | ON 1183296 | Trinity Marine, Ashland City Hull 4515 |
| 7 | KIRBY 28075 | ON 1183297 | Trinity Marine, Ashland City Hull 4516 |
| 8 | KIRBY 28076 | ON 1183298 | Trinity Marine, Ashland City Hull 4517 |
| 9 | KIRBY 28077 | ON 1183307 | Trinity Marine, Ashland City Hull 4518 |
| 10 | KIRBY 28078 | ON 1183299 | Trinity Marine, Ashland City Hull 4519 |
| 11 | KIRBY 28079 | ON 1183306 | Trinity Marine, Ashland City Hull 4520 |
| 12 | KIRBY 28080 | ON 1183300 | Trinity Marine, Ashland City Hull 4521 |
| 13 | KIRBY 28081 | ON 1183305 | Trinity Marine, Ashland City Hull 4522 |
| 14 | KIRBY 28082 | ON 1183301 | Trinity Marine, Ashland City Hull 4523 |
| 15 | KIRBY 28083 | ON 1183304 | Trinity Marine, Ashland City Hull 4524 |
| 16 | KIRBY 28084 | ON 1183302 | Trinity Marine, Ashland City Hull 4525 |
| 17 | KIRBY 28085 | ON 1183303 | Trinity Marine, Ashland City Hull 4526 |

- (b) Per USCG MSC letter 16710/P014610, Serial C2-0901821 dated June 17, 2009, the following Kirby barges are accepted by the USCG MSC for dual loading operations under conditions as specified.

| | Vessel Name | Official No. | Yard and Hull No. |
|---|-------------|--------------|--|
| 1 | KIRBY 27754 | ON 1208455 | Trinity Marine, Ashland City Hull 4577 |
| 2 | KIRBY 27755 | ON 1208454 | Trinity Marine, Ashland City Hull 4578 |
| 3 | KIRBY 27762 | ON 1217135 | Trinity Marine, Ashland City Hull 4642 |
| 4 | KIRBY 27763 | ON 1217671 | Trinity Marine, Ashland City Hull 4656 |
| 5 | KIRBY 27764 | ON 1217672 | Trinity Marine, Ashland City Hull 4657 |

- (c) Per USCG MSC letter 16710/P014921, Serial C2-0902658 dated September 25, 2009, the following Kirby barges are accepted by the USCG MSC for dual loading operations under conditions as specified.

| | Vessel Name | Official No. | Yard and Hull No. |
|---|-------------|--------------|--|
| 1 | KIRBY 28100 | ON 1218799 | Trinity Marine, Ashland City Hull 4599 |
| 2 | KIRBY 28101 | ON 1218800 | Trinity Marine, Ashland City Hull 4600 |
| 3 | KIRBY 28102 | ON 1218801 | Trinity Marine, Ashland City Hull 4601 |
| 4 | KIRBY 28103 | ON 1218802 | Trinity Marine, Ashland City Hull 4602 |



| | | | |
|----|-------------|------------|--|
| 5 | KIRBY 28104 | ON 1219322 | Trinity Marine, Ashland City Hull 4608 |
| 6 | KIRBY 28105 | ON 1219323 | Trinity Marine, Ashland City Hull 4609 |
| 7 | KIRBY 28106 | ON 1219324 | Trinity Marine, Ashland City Hull 4618 |
| 8 | KIRBY 28107 | ON 1219325 | Trinity Marine, Ashland City Hull 4619 |
| 9 | KIRBY 28108 | ON 1220272 | Trinity Marine, Ashland City Hull 4620 |
| 10 | KIRBY 28109 | ON 1220274 | Trinity Marine, Ashland City Hull 4627 |
| 11 | KIRBY 28110 | ON 1220275 | Trinity Marine, Ashland City Hull 4628 |
| 12 | KIRBY 28111 | ON 1220276 | Trinity Marine, Ashland City Hull 4629 |
| 13 | KIRBY 28112 | ON 1220958 | Trinity Marine, Ashland City Hull 4630 |
| 14 | KIRBY 28113 | ON 1220959 | Trinity Marine, Ashland City Hull 4631 |
| 15 | KIRBY 28114 | ON 1220961 | Trinity Marine, Ashland City Hull 4655 |
| 16 | KIRBY 28115 | ON 1220962 | Trinity Marine, Ashland City Hull 4658 |
| 17 | KIRBY 28116 | ON 1220963 | Trinity Marine, Ashland City Hull 4659 |
| 18 | KIRBY 28117 | ON 1221772 | Trinity Marine, Ashland City Hull 4660 |
| 19 | KIRBY 28118 | CG 1003467 | Trinity Marine, Ashland City Hull 4661 |
| 20 | KIRBY 28119 | CG 1003469 | Trinity Marine, Ashland City Hull 4662 |

(d) Per USCG MSC letter 16710/P009946, Serial C2-0902660 dated September 25, 2009, the following Kirby barges are accepted by the USCG MSC for dual loading operations under conditions as specified.

| | Vessel Name | Official No. | Yard and Hull No. |
|----|-------------|--------------|--|
| 1 | KIRBY 28060 | ON 1151555 | Trinity Marine, Ashland City Hull 4460 |
| 2 | KIRBY 28061 | ON 1151556 | Trinity Marine, Ashland City Hull 4461 |
| 3 | KIRBY 28062 | ON 1151557 | Trinity Marine, Ashland City Hull 4462 |
| 4 | KIRBY 28063 | ON 1151558 | Trinity Marine, Ashland City Hull 4463 |
| 5 | KIRBY 28064 | ON 1158897 | Trinity Marine, Ashland City Hull 4469 |
| 6 | KIRBY 28065 | ON 1158899 | Trinity Marine, Ashland City Hull 4470 |
| 7 | KIRBY 28066 | ON 1158900 | Trinity Marine, Ashland City Hull 4471 |
| 8 | KIRBY 28067 | ON 1158901 | Trinity Marine, Ashland City Hull 4472 |
| 9 | KIRBY 28068 | ON 1158902 | Trinity Marine, Ashland City Hull 4473 |
| 10 | KIRBY 28069 | ON 1166461 | Trinity Marine, Ashland City Hull 4481 |
| 11 | KIRBY 28070 | ON 1166451 | Trinity Marine, Ashland City Hull 4482 |
| 12 | KIRBY 28071 | ON 1166462 | Trinity Marine, Ashland City Hull 4483 |
| 13 | KIRBY 28072 | ON 1166463 | Trinity Marine, Ashland City Hull 4484 |

(e) Per USCG MSC letter 16710/P015198, Serial C2-0902662 dated September 25, 2009, the following Kirby barges are accepted by the USCG MSC for dual loading operations under conditions as specified.

| | Vessel Name | Official No. | Yard and Hull No. |
|---|-------------|--------------|---------------------------|
| 1 | KIRBY 29014 | ON 1045800 | Trinity Platzer Hull E334 |

(f) Per USCG MSC letter 16710/P012891, Serial C1-1000483 dated March 2, 2010, the following Kirby barges are accepted by the USCG MSC for dual loading operations under conditions as specified.

ENCLOSURE(1)