

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

Certification Date: 20 Jul 2022 Expiration Date: 20 Jul 2027

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, requisition V/14, for a SAFE MANNING DOCUMENT.

| CIRBY 28050 | | | IMO Numb | ber | Call Sign | Service Tank Barge | | |
|--|---|-------------------------|--------------------------------|---------------------------|--------------------|--------------------|----------------|--|
| lailing Port | | | | | | | · | |
| WILMINGTON, DE | | Hull Material | Horse | power | Propulsion | | | |
| UNITED STATES | | Steel | | | | | | |
| Place Built | Del | ivery Date | Keel Laid Data | Gross Tons | 3. | . | | |
| GALVESTON, TX | | | | R-1619 | Net Tons R-1619 | DWT | Length | |
| UNITED STATES | 02 | Apr2007 | 15Jan2007 | F | 1- | | R-297 5 I-0 | |
| Dwner | | | | | | | 3 | |
| KIRBY INLAND MARINE I 55 WAUGH DR STE 1000 HOUSTON, TX 77007 | _P) | | 1835 | Y INLAND 0 Market St | | | | |
| UNITED STATES | | | | inelview, TX ED STATE | | | | |
| This vessel must be manne 0 Certified Lifeboatmen, 0 | ed with the followin Certified Tankerm | g licensed en, 0 HSC | and unlicensed Type Rating, | d Personnel and 0 GMD: | . Included in w | hich there r | must be | |
| 0 Masters | 0 Licensed Mates | | Engineers | | ilers | | | |
| 0 Chief Mates | 0 First Class Pilots | 0 First | Assistant Enginee | | | | | |
| 0 Second Mates | 0 Radio Officers | | nd Assistant Engir | - | | | | |
| 0 Third Mates | 0 Able Seamen | | Assistant Engine | | | | | |
| 0 Master First Class Pilot | 0 Ordinary Seamen | | sed Engineers | | | | | |
| 0 Mate First Class Pitots | 0 Deckhands | 0 Quali | fied Member Engi | neer | | | | |
| In addition, this vessel may Persons allowed: 0 | y carry 0 Passenge | | | | ns in addition to | o crew, and | no Others. To | |

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 OCMI 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

Annual/Derindia/De Inspection

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.

| Date | Zone | A/P/R | Signature | B. T. INAGAKI, GS-13, USCG, By direction |
|------------------|------|-------|--------------------------------|--|
| 615128 9.6.24 | HOU | A | Andrew Maharel JAKE FRANCIS | Officer in Charge, Marine Inspection Marine Safety Unit Port Arthur |
| | | | | Inspection Zone |



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

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Certificate of Inspection

Vessel Name: KIRBY 28050

(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

31May2027

31May2017

02Apr2007

Internal Structure

31May2027

20Jul2022

31May2017

--- 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

28717

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 | 686 | 13.6 |
| 2 P/S | 829 | 13.6 |
| 3 P/S | 727 | 13.6 |

Loading Constraints - Stability

| Hull Type | Maximum Load (short tons) | Maximum Draft (ft/in) | Max Density (lbs/gal) | Route Description |
|-----------|---------------------------|-----------------------|--------------------------|------------------------------|
| 11 | 3902 | 10ft 3in | 13.6 | |
| II | 3902 | 10ft 3in | 13.6 | Limited Coastwise 0-12 miles |
| 11 | 3902 | 10ft 3in | 13.6 | |
| Ш | 4272 | 11ft 0in | 13.6 | |
| Ш | 4272 | 11ft 0in | 13.6 | Limited Coastwise 0-12 miles |
| ш | 4272 | 11ft 0in | 13.6 | |

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #C2-0702494, dated 13Aug07, may be carried and then only in the tanks indicated.

Per 46 CFR 150.130, the person in charge of the vessel is responsible for ensuring 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 greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 CFR part 197, Subpart C are applied.

Per 46 CFR, 39, excluding Part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by Marine Safety Center letter serial #C2-0702494, dated 13Aug07, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

^{*}Vapor Control Authorization*



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

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Vessel Name: KIRBY 28050

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

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 8.745 lbs/gal. Cargoes with higher densities, up 13.6 lbs. gal, may be carried slack loads, but shall not exceed the tank weight limits as listed above. The cargo tank top is suitable for a maximum allowable working pressure (MDWP) of 6.108 psi.

--- Inspection Status ---

Cargo Tanks

| y . | Internal Exam | | | External Exam | n | |
|---------|---------------|-----------|------------|---------------|------|------|
| Tank Id | Previous | Last | Next | Previous | Last | Next |
| 1 P/S | 02Apr2017 | 31May2017 | 31May2027 | - | - | - |
| 2 P/S | 02Apr2017 | 31May2017 | 31May2027 | - | - | - |
| 3 P/S | 02Apr2007 | 31May2017 | 31May2027 | - | - | - |
| , | | | Hydro Test | | | |
| Tank Id | Safety Valves | | Previous | Last | Next | |
| 1 P/S | - | | - | - | - | |
| 2 P/S | - | | - | - | | |
| 3 P/S | _ | | - | - | - | |

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

Quantity

Class Type

2

40-B

END





Cargo Authority Attachment

Vessel Name: KIRBY 28050

Shipyard: West Gulf Marine

Serial #: C2-0702494

13-Aug-07

Hull #: 168

Official #: 1193005

| Tank Group Information | Cargo I | dentificati | ntification Tanks | | | | | | Environmental Control | | Special Requirements | | | | | | |
|----------------------------|---------|-------------|-------------------|-------------|------------|---------------------|------|--------|--------------------------|------|----------------------|-------------------|------------------------|--|---|------|------|
| Trik Grp Tanks in Group | Density | Press. | Temp. | Hull Typ | Sea | Туре | Vent | Gauge | Pipe Class | Cont | Tanks | Handling Space | Protection Provided | General | Materials of Construction | Elec | Temp |
| A #1P/S, #2P/S, #3P/S | 13.6 | Atmos. | Amb. | 11 | 1ii 2ii | Integral Gravity | PV | Closed | 11 | G-1 | NR | NA | Portable | .50-60, .50-70(a), .50-70(b), .50-73, | 55-1(b), (c), (e), (f), (j), 56-1(a), (b), (c), (d), (e), (f), (g), | NR | No |

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

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

List of Authorized Cargoes

| Cargo Identificatio | n | | | | | Conditions of Carriage | | | | | |
|---|--------------|--------------------|----------------|-------|--------------|------------------------|-------------------|-----------------|---|----------------|--|
| | | | | | | | Vapor Re | ecovery | | T | |
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd (Y or N) | VCS Category | Special Requirements in 46 CFR 151 General and Mat'ls of | Insp. Perio | |
| Authorized Subchapter O Cargoes | | | | | | | | | | | |
| Acetonitrile | ATN | 37 | 0 | С | Ш | Α | Yes | 3 | No | G | |
| Acrylonitrile | ACN | 15 ² | 0 | С | Ш | Α | Yes | 4 | .50-70(a), .55-1(e) | G | |
| Adiponitrile | ADN | 37 | 0 | E | 11 | Α | Yes | 1 | No | G | |
| Alkyl(C7-C9) nitrates | AKN | 34 2 | 0 | NA | Ш | Α | No | N/A | .50-81, .50-86 | G | |
| Aminoethylethanolamine | AEE | 8 | 0 | Е | III | Α | Yes | 1 | .55-1(b) | G | |
| Ammonium bisulfite solution (70% or less) | ABX | 43 2 | 0 | NA | III | Α | No | N/A | .50-73, .56-1(a), (b), (c) | G | |
| Ammonium hydroxide (28% or less NH3) | AMH | 6 | 0 | NA | 111 | Α | No | N/A | .56-1(a), (b), (c), (f), (g) | G | |
| Anthracene oil (Coal tar fraction) | AHO | 33 | 0 | NA | 11 | Α | No | N/A | No | G | |
| Benzene | BNZ | 32 | 0 | С | III | Α | Yes | 1 | .50-60 | G | |
| Benzene or hydrocarbon mixtures (having 10% Benzene or more) | ВНВ | 32 2 | 0 | С | III | Α | Yes | 1 | .50-60 | G | |
| Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more) | ВНА | 32 2 | 0 | С | 111 | Α | Yes | 1 | .50-60, .56-1(b), (d), (f), (g) | G | |
| Benzene, Toluene, Xylene mixtures (10% Benzene or more) | BTX | 32 | 0 | B/C | III | Α | Yes | 1 | .50-60 | G | |
| Butyl acrylate (all isomers) | BAR | 14 | 0 | D | III | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Butyl methacrylate | ВМН | 14 | 0 | D | 111 | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Butyraldehyde (all isomers) | BAE | 19 | 0 | С | 111 | Α | Yes | 1 | .55-1(h) | G | |
| Camphor oil (light) | CPO | 18 | 0 | D | 11 | Α | No | N/A | No | G | |
| Carbon tetrachloride | CBT | 36 | 0 | NA | 111 | Α | No | N/A | No | G | |
| Caustic potash solution | CPS | 5 ² | 0 | NA | Ш | Α | No | N/A | .50-73, .55-1(j) | G | |
| Caustic soda solution | CSS | 5 ² | 0 | NA | 111 | Α | No | N/A | .50-73, .55-1(j) | G | |
| Chemical Oil (refined, containing phenolics) | COD | 21 | 0 | E | II | Α | No | N/A | .50-73 | G | |
| Chlorobenzene | CRB | 36 | 0 | D | III | Α | Yes | 1 | No | G | |
| Chloroform | CRF | 36 | 0 | NA | 111 | Α | Yes | 3 | No | G | |
| Coal tar naphtha solvent | NCT | 33 | 0 | D | III | Α | Yes | 1 | .50-73 | G | |
| Creosote | CCW | 21 2 | 0 | E | III | Α | Yes | 1 | No | G | |
| Cresols (all isomers) | CRS | 21 | 0 | E | 111 | Α | Yes | 1 | No | G | |
| Cresylate spent caustic | CSC | 5 | 0 | NA | 111 | Α | No | N/A | .50-73, .55-1(b) | G | |
| Cresylic acid tar | CRX | | 0 | E | III | Α | Yes | 1 | .55-1(f) | G | |
| Crotonaldehyde | СТА | 19 ² | 0 | С | .11 | Α | Yes | 4 | .55-1(h) | G | |
| Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein) | CHG | | 0 | С | Ш | Α | No | N/A | No | G | |
| Cyclohexanone | ССН | 18 | 0 | D | III | Α | Yes | 1 | .56-1(a), (b) | G | |
| Cyclohexanone, Cyclohexanol mixture | CYX | 18 ² | 0 | E | III | Α | Yes | 1 | .56-1 (b) | G | |
| Cyclohexylamine | CHA | 7 | 0 | D | 111 | Α | Yes | 1 | .56-1(a), (b), (c), (g) | G | |
| Cyclopentadiene, Styrene, Benzene mixture | CSB | 30 | 0 | D | III | Α | Yes | 1 | .50-60, .56-1(b) | G | |
| iso-Decyl acrylate | IAI | 14 | 0 | E | Ш | Α | Yes | 2 | .50-70(a), .50-81(a), (b), .55-1(c) | G | |

Serial #:

C2-0702494

ted: 13-Aug-07



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28050 Official #: 1193005

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Shipyard: West Gulf Marine

| Cargo Identification | 1 | | | | | Conditions of Carriage | | | | | | |
|--|------|-----------------|-----|--------|-------|------------------------|------------------|----------|--------------------------------|-----------------|--|--|
| | Chem | Compat | Sub | | Hull | Tank | Vapor F App'd | Recovery | Special Requirements in 46 CFR | lass | | |
| Name | Code | Group No | | Grade | Туре | Group | | Category | 151 General and Mattls of | Insp. Period | | |
| Dichlorobenzene (all isomers) | DBX | 36 | 0 | E | III | Α | Yes | 3 | .56-1(a), (b) | G | | |
| 1,1-Dichloroethane | DCH | 36 | 0 | С | 111 | Α | Yes | 1 | No | G | | |
| 2,2'-Dichloroethyl ether | DEE | 41 | 0 | D | П | Α | Yes | 1 | .55-1(f) | G | | |
| Dichloromethane | DCM | 36 | 0 | NA | III | Α | No | N/A | No | G | | |
| 2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution | DDE | 43 | 0 | E | Ш | Α | No | N/A | .56-1(a), (b), (c), (g) | G | | |
| 2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution | DAD | 0 1,2 | 0 | Α | Ш | Α | No | N/A | .56-1(a), (b), (c), (g) | G | | |
| 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution | DTI | 43 2 | 0 | E | 111 | Α | No | N/A | .56-1(a), (b), (c), (g) | G | | |
| 1,1-Dichloropropane | DPB | 36 | 0 | С | III | Α | Yes | 3 | No | G | | |
| 1,2-Dichloropropane | DPP | 36 | 0 | С | 111 | Α | Yes | 3 | No | G | | |
| 1,3-Dichloropropane | DPC | 36 | 0 | С | III | Α | Yes | 3 | No | G | | |
| 1,3-Dichloropropene | DPU | 15 | 0 | D | II | Α | Yes | 4 | No | G | | |
| Dichloropropene, Dichloropropane mixtures | DMX | 15 | 0 | С | 11 | Α | Yes | 1 | No | G | | |
| Diethanolamine | DEA | 8 | 0 | E | III | Α | Yes | 1 | .55-1(c) | G | | |
| Diethylamine | DEN | 7 | 0 | C | 111 | A | Yes | 3 | .55-1(c) | G | | |
| Diethylenetriamine | DET | 7 2 | 0 | E | III | A | Yes | 1 | .55-1(c) | G | | |
| Diisobutylamine | DBU | 7 | 0 | D | | A | Yes | | .55-1(c) | G | | |
| Diisopropanolamine | DIP | 8 | 0 | E | | A | Yes | | .55-1(c) | G | | |
| Diisopropylamine | DIA | 7 | 0 | c | 11 | A | Yes | | .55-1(c) | G | | |
| N,N-Dimethylacetamide | DAC | 10 | 0 | E | 111 | A | Yes | 3 | .56-1(b) | G | | |
| Dimethylethanolamine | DMB | | 0 | D | 111 | A | Yes | 1 | .56-1(b), (c) | G | | |
| Dimethylformamide | DMF | 10 | 0 | D | 111 | A | Yes | | .55-1(e) | G | | |
| | DNA | 7 | 0 | C | - 11 | A | Yes | 3 | .55-1(c) | G | | |
| Di-n-propylamine Dedoculdimethylamina Totadoculdimethylamina mixtura | DOT | 7 | 0 | E | 111 | A | No | N/A | | G | | |
| Dodecyldimethylamine, Tetradecyldimethylamine mixture Dodecyl diphenyl ether disulfonate solution | DOS | | 0 | # | II | A | No | N/A | | G | | |
| | EEG | 40 | 0 | # D | 111 | A | No | N/A | | G | | |
| EE Glycol Ether Mixture | MEA | | | E | | | | | .55-1(c) | G | | |
| Ethanolamine | | - VS/ | 0 | | 111 | A | Yes | | .50-70(a), .50-81(a), (b) | G | | |
| Ethyl acrylate | EAC | 14 | 0 | C | - 111 | A | Yes | | .55-1(b) | G | | |
| Ethylamine solution (72% or less) | EAN | 7 | 0 | A | - !! | A | Yes | | .55-1(b) | G | | |
| N-Ethylbutylamine | EBA | 7 | 0 | D | 111 | Α . | Yes | 3 | .55-1(b) | G | | |
| N-Ethylcyclohexylamine | ECC | 7 | 0 | D | 111 | A | Yes | | | | | |
| Ethylene cyanohydrin | ETC | 20 | 0 | E | III | Α | Yes | | No . | G | | |
| Ethylenediamine | EDA | 7 2 | 0 | D | 111 | A | Yes | | .55-1(c) | | | |
| Ethylene dichloride | EDC | | 0 | С | 111 | A | Yes | | No | G | | |
| Ethylene glycol hexyl ether | EGH | | 0 | E | 111 | A | No | N/A | | G | | |
| Ethylene glycol monoalkyl ethers | EGC | | 0 | D/E | 111 | Α | Yes | | No | G | | |
| Ethylene glycol propyl ether | EGP | 40 | 0 | E | III | Α | Yes | | No | G | | |
| 2-Ethylhexyl acrylate | EAI | 14 | 0 | E | 111 | Α | Yes | | .50-70(a), .50-81(a), (b) | G | | |
| Ethyl methacrylate | ETM | | 0 | D/E | 111 | Α | Yes | | .50-70(a) | G | | |
| 2-Ethyl-3-propylacrolein | EPA | 19 ² | 0 | E | Ш | Α | Yes | 1 | No | G | | |
| Formaldehyde solution (37% to 50%) | FMS | | 0 | D/E | 111 | Α | Yes | | .55-1(h) | G | | |
| Furfural | FFA | 19 | 0 | D | 111 | Α | Yes | 1 | .55-1(h) | G | | |
| Glutaraldehyde solution (50% or less) | GTA | | 0 | NA | 111 | Α | No | N/A | | G | | |
| Hexamethylenediamine solution | HMC | | 0 | E | Ш | Α | Yes | | .55-1(c) | G | | |
| Hexamethyleneimine | HMI | 7 | 0 | С | II | Α | Yes | | .56-1(b), (c) | G | | |
| Hydrocarbon 5-9 | HFN | | 0 | С | III | Α | Yes | | .50-70(a), .50-81(a), (b) | G | | |
| Isoprene | IPR | 30 | 0 | Α | 111 | Α | No | N/A | | G | | |
| Isoprene, Pentadiene mixture | IPN | | 0 | В | Ш | Α | No | N/A | | G | | |
| Kraft pulping liquors (free alkali content 3% or more)(including: Black Green, or White liquor) | *** | 5 | 0 | NA | III | Α | No | N/A | | G | | |
| Mesityl oxide | MSC | 18 ² | 0 | D | 111 | Α | Yes | 1 | No | G | | |
| Methyl acrylate | MAN | 1 14 | 0 | С | III | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | | |
| | | | | | | | | | | | | |

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



Cargo Authority Attachment

Vessel Name: KIRBY 28050

Official #: 1193005

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Shipyard: West Gulf Marine

C2-0702494

13-Aug-07

| Cargo Identification | n | | | | | Conditions of Carriage | | | | | |
|---|------|--------------------|----------------|-------|--------------|------------------------|-------------------|-----------------|--|----------------|--|
| | 0 | 0 | | | | | - | Recovery | 7 | | |
| Name | Chem | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd (Y or N) | VCS Category | Special Requirements in 46 CFR 151 General and Mat'ls of | Insp. Perio | |
| Methylcyclopentadiene dimer | MCK | 30 | 0 | С | Ш | Α | Yes | 1 | No | G | |
| Methyl diethanolamine | MDE | 8 | 0 | E | III | Α | Yes | 1 | .56-1(b), (c) | G | |
| 2-Methyl-5-ethylpyridine | MEP | 9 | 0 | E | III | Α | Yes | 1 | .55-1(e) | G | |
| Methyl methacrylate | MMM | 14 | 0 | С | III | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| 2-Methylpyridine | MPR | 9 | 0 | D | Ш | Α | Yes | 3 | .55-1(c) | G | |
| alpha-Methylstyrene | MSR | 30 | 0 | D | 111 | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Morpholine | MPL | 7 2 | 0 | D | 111 | Α | Yes | 1 | .55-1(c) | G | |
| 1- or 2-Nitropropane | NPM | 42 | 0 | D | . 111 | Α | Yes | 1 | .50-81 | G | |
| 1,3-Pentadiene | PDE | 30 | 0 | Α | 111 | Α | Yes | 7 | .50-70(a), .50-81 | G | |
| Perchloroethylene | PER | 36 | 0 | NA | 111 | Α | No | N/A | No | G | |
| Polyethylene polyamines | PEB | 7 2 | 0 | E | 111 | Α | Yes | 1 | .55-1(e) | G | |
| iso-Propanolamine | MPA | 8 | 0 | E | III | Α | Yes | 1 | .55-1(c) | G | |
| Propanolamine (iso-, n-) | PAX | 8 | 0 | E | III | Α | Yes | 1 | .56-1(b), (c) | G | |
| iso-Propylamine | IPP | 7 | 0 | Α | 11 | Α | No | N/A | .55-1(c) | G | |
| Pyridine | PRD | 9 | 0 | С | 111 | Α | Yes | 1 | .55-1(e) | G | |
| Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide) | SAP | | 0 | | 111 | Α | No | N/A | .50-73, .55-1(j) | G | |
| Sodium aluminate solution (45% or less) | SAU | 5 | 0 | NA | III | Α | No | N/A | .50-73, .56-1(a), (b), (c) | G | |
| Sodium chlorate solution (50% or less) | SDD | 0 1,2 | 0 | NA | III | Α | No | N/A | | G | |
| Sodium hypochlorite solution (20% or less) | SHQ | 5 | 0 | NA | III | A | No | N/A | | G | |
| Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less) | SSH | 0 1,2 | 0 | 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 | 0 | 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 | 0 | NA | П | Α | No | N/A | .50-73, .55-1(b) | G | |
| Styrene (crude) | STX | | 0 | D | III | Α | Yes | 2 | No | G | |
| Styrene monomer | STY | 30 | 0 | D | III | Α | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| 1,1,2,2-Tetrachloroethane | TEC | 36 | 0 | NA | 111 | Α | No | N/A | No · | G | |
| Tetraethylenepentamine | TTP | 7 | 0 | E | 111 | Α | Yes | 1 | .55-1(c) | G | |
| Tetrahydrofuran | THF | 41 | 0 | С | III | Α | Yes | 1 | .50-70(b) | G | |
| Toluenediamine | TDA | 9 | 0 | E | II | Α | No | N/A | .50-73, .56-1(a), (b), (c), (g) | G | |
| 1,2,4-Trichlorobenzene | тсв | 36 | 0 | E | III | Α | Yes | 1 | No | G | |
| 1,1,2-Trichloroethane | TCM | 36 | 0 | NA | III | A | Yes | 1 | .50-73, .56-1(a) | G | |
| Trichloroethylene | TCL | 36 ² | 0 | NA | 111 | A | Yes | 1 | No | G | |
| 1,2,3-Trichloropropane | TCN | 36 | 0 | E | 11 | A | Yes | 3 | .50-73, .56-1(a) | G | |
| Triethanolamine | TEA | 8 2 | 0 | E | 111 | A | Yes | 1 | .55-1(b) | G | |
| Triethylamine | TEN | 7 | 0 | c | 11 | A | Yes | 3 | .55-1(e) | G | |
| Triethylenetetramine | TET | 7 2 | 0 | E | III | A | Yes | 1 | .55-1(b) | G | |
| Triphenylborane (10% or less), caustic soda solution | TPB | 5 | 0 | NA | 111 | A | No | N/A | | G | |
| Trisodium phosphate solution | TSP | 5 | 0 | NA | III | A | No | N/A | N. SERVICE STATE OF THE SERVIC | G | |
| Urea. Ammonium nitrate solution (containing more than 2% NH3) | UAS | 6 | 0 | NA | | A | No | N/A | | G | |
| Vanillin black liquor (free alkali content, 3% or more). | VBL | 5 | 0 | NA | 111 | A | No | N/A | | G | |
| Vinyl acetate | VAM | 13 | 0 | C | 111 | A | Yes | 2 | .50-70(a), .50-81(a), (b) | G | |
| Vinyl neodecanate | VND | 13 | 0 | E | 111 | A | No | N/A | | G | |
| Vinyltoluene | VNT | 13 | 0 | | 111 | A | Yes | 2 | .50-70(a), .50-81, .56-1(a), (b), (c), (| G | |
| Subchapter D Cargoes Authorized for Vapor Contr | | 10 | | | | | 163 | | | | |
| Acetone | ACT | 18 ² | D | С | | Α | Yes | 1 | | | |
| Acetophenone | ACP | 18 | D | E | | Α | 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 | | | |
| Amyl acetate (all isomers) | AEC | 34 | D | D | | A | Yes | 1 | | | |



Cargo Authority Attachment

Vessel Name: KIRBY 28050

Official #: 1193005

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Shipyard: West Gulf Marine

C2-0702494

| Cargo Identification | า | | | | | Conditions of Carriage | | | | | | |
|---|--------------|--------------------|----------------|-------|--------------|------------------------|-------------------|-----------------|---|-----------------|--|--|
| | | | | | | | Vapor Recovery | | | | | |
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd (Y or N) | VCS Category | Special Requirements in 46 CFR 151 General and Mat'ls of | Insp. Period | | |
| Amyl alcohol (iso-, n-, sec-, primary) | AAI | 20 | D | D | | Α | Yes | 1 | | | | |
| Benzyl alcohol | BAL | 21 | D | E | | Α | Yes | 1 | | | | |
| Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters) | BFX | 20 | D | E | | Α | Yes | 1 | | | | |
| Butyl acetate (all isomers) | BAX | 34 | D | D | | Α | Yes | 1 | | | | |
| Butyl alcohol (iso-) | IAL | 20 2 | D | D | | Α | Yes | 1 | | | | |
| Butyl alcohol (n-) | BAN | | D | D | | Α | Yes | 1 | | | | |
| Butyl alcohol (sec-) | BAS | | D | С | | Α | Yes | 1 | | | | |
| Butyl alcohol (tert-) | BAT | | D | С | | Α | Yes | 1 | | | | |
| Butyl benzyl phthalate | BPH | 34 | D | E | | Α | Yes | 1 | | | | |
| Butyl toluene | BUE | 32 | D | D | | Α | Yes | 1 | | | | |
| Caprolactam solutions | CLS | 22 | D | Е | | Α | Yes | 1 | | * | | |
| Cyclohexane | CHX | 31 | D | С | | Α | Yes | 1 | | | | |
| Cyclohexanol | CHN | 20 | D | E | | Α | Yes | 1 | | | | |
| 1,3-Cyclopentadiene dimer (molten) | CPD | 30 | D | D/E | | Α | Yes | 2 | | | | |
| p-Cymene | CMP | 32 | D | D | | Α | 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 | | E | | A | Yes | 1 | | - | | |
| Diethylbenzene | DEB | 32 | D | D | | | Yes | 1 | | 1100 | | |
| | DEG | 40 ² | D | E | | A | Yes | 1 | | | | |
| Diethylene glycol Diisobutylene | DBL | 30 | D | C | | A | Yes | 1 | | | | |
| | DIK | 18 | D | D | | A | Yes | 1 | | | | |
| Diisobutyl ketone | DIX | 32 | D | E | | | | | | | | |
| Diisopropylbenzene (all isomers) | DTL | 34 | D | E | - | A | Yes | 1 | | | | |
| Dimethyl phthalate | | | | | | A | | 1 | | | | |
| Dioctyl phthalate | DOP | 34 | D | E | | A | Yes | 1 | | | | |
| Dipentene | DPN | 30 | D | D //F | | _ 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 | | Α | Yes | 1 | | | | |
| Distillates: Flashed feed stocks | DFF | 33 | D | E | | Α | Yes | 1 | | | | |
| Distillates: Straight run | DSR | 33 | D | E | | Α | Yes | 1 | | | | |
| Dodecene (all isomers) | DOZ | 30 | D | D | | Α | Yes | 1 | | | | |
| Dodecylbenzene, see Alkyl(C9+)benzenes | DDB | 32 | D | E | | A | Yes | 1 | | | | |
| 2-Ethoxyethyl acetate | EEA | 34 | D | D | | Α | Yes | 1 | | | | |
| Ethoxy triglycol (crude) | ETG | 40 | D | E | | Α | Yes | 1 | | | | |
| Ethyl acetate | ETA | 34 | D | С | | Α | Yes | 1 | | | | |
| Ethyl acetoacetate | EAA | 34 | D | E | | Α | Yes | 1 | | | | |
| Ethyl alcohol | EAL | 20 2 | D | С | | Α | Yes | 1 | | | | |
| Ethylbenzene | ETB | 32 | D | С | | Α | Yes | 1 | | | | |
| Ethyl butanol | EBT | 20 | D | D | | Α | Yes | 1 | | | | |
| Ethyl tert-butyl ether | EBE | 41 | D | С | | Α | Yes | 1 | | | | |
| Ethyl butyrate | EBR | 34 | D | D | | Α | Yes | 1 | | | | |
| Ethyl cyclohexane | ECY | 31 | D | D | | Α | Yes | 1 | | | | |
| Ethylene glycol | EGL | 20 2 | D | E | | Α | Yes | 1 | | | | |



Cargo Authority Attachment

Vessel Name: KIRBY 28050

Official #: 1193005

Page 5 of 7

Shipyard: West Gulf Marine

13-Aug-07

| Cargo Identificatio | n | | | | | Conditions of Carriage | | | | | |
|---|--------------|--------------------|----------------|----------|--------------|------------------------|-------|-----------------|---|-----------------|--|
| 3 | - | | | | | Vapor Recovery | | | | | |
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd | VCS Category | Special Requirements in 46 CFR 151 General and Mat'ls of | Insp. Period | |
| Ethylene glycol butyl ether acetate | EMA | 34 | D | E | | Α | Yes | 1 | | | |
| Ethylene glycol diacetate | EGY | 34 | D | E | | Α | Yes | 1 | | | |
| Ethylene glycol phenyl ether | EPE | 40 | D | E | | Α | Yes | 1 | | | |
| Ethyl-3-ethoxypropionate | EEP | 34 | D | D | | Α | Yes | 1 | | | |
| 2-Ethylhexanol | EHX | 20 | D | E | | Α | Yes | 1 | | | |
| Ethyl propionate | EPR | 34 | D | С | | Α | Yes | 1 | | | |
| Ethyl toluene | ETE | 32 | D | D | | Α | Yes | 1 | | | |
| Formamide | FAM | 10 | D | E | | Α . | Yes | 1 | | | |
| Furfuryl alcohol | FAL | 20 2 | D | E | 21 | Α | Yes | 1 | | | |
| Gasoline blending stocks: Alkylates | GAK | 33 | D | A/C | | Α | Yes | 1 | | | |
| Gasoline blending stocks: Reformates | GRF | 33 | D | A/C | | Α | Yes | 1 | | | |
| Gasolines: Automotive (containing not over 4.23 grams lead per gallon) | GAT | 33 | D | С | | Α | Yes | 1 | [1 | | |
| Gasolines: Aviation (containing not over 4.86 grams of lead per gallon) | GAV | 33 | D | С | | Α | Yes | 1 | | | |
| Gasolines: Casinghead (natural) | GCS | 33 | D | A/C | | Α | Yes | 1 | | | |
| Gasolines: Polymer | GPL | 33 | D | A/C | | Α | Yes | 1 | | | |
| Gasolines: Straight run | GSR | 33 | D | A/C | | Α | Yes | 1 | | | |
| Glycerine | GCR | 20 2 | D | E | | Α | Yes | 1 | | | |
| Heptane (all isomers), see Alkanes (C6-C9) (all isomers) | HMX | 31 | D | С | | Α | Yes | 1 | | | |
| Heptanoic acid | HEP | 4 | D | E | | Α | Yes | 1 | | | |
| Heptanol (all isomers) | HTX | 20 | D | D/E | | Α | Yes | 1 | | | |
| Heptene (all isomers) | HPX | 30 | D | С | | Α | Yes | 2 | | | |
| Heptyl acetate | HPE | 34 | D | E | | Α | Yes | 1 | | | |
| Hexane (all isomers), see Alkanes (C6-C9) | HXS | 31 ² | D | B/C | | Α | Yes | 1 | | | |
| Hexanoic acid | НХО | 4 | D | E | | Α | Yes | 1 | | | |
| Hexanol | HXN | 20 | D | D | | Α | Yes | 1 | | | |
| Hexene (all isomers) | HEX | 30 | D | С | | Α | Yes | 2 | | | |
| Hexylene glycol | HXG | 20 | D | E | | Α | Yes | 1 | | | |
| Isophorone | IPH | 18 ² | D | Е | | Α. | 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 | С | | 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 | | | |
| | NSS | 33 | D | D | | A | Yes | 1 | | | |
| Naphtha: Stoddard solvent | 1422 | 33 | U | U | | A | 162 | - 1 | | | |

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









Cargo Authority Attachment

Vessel Name: KIRBY 28050

Official #: 1193005

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Shipyard: West Gulf Marine

| Cargo Identifica | tion | | | | | Conditions of Carriage | | | | | | |
|---|--------------|--------------------|----------------|-------|--------------|------------------------|-------------------|-----------------|--|-----------------|--|--|
| | | | | | | | | Recovery | | \neg | | |
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd (Y or N) | VCS Category | Special Requirements in 46 CFR 151 General and Matls of | Insp. Period | | |
| Naphtha: Varnish makers and painters (75%) | NVM | 33 | D | С | | Α | Yes | 1 | | | | |
| Nonane (all isomers), see Alkanes (C6-C9) | NAX | 31 | D | D | | Α | Yes | 1 | | | | |
| Nonene (all isomers) | NON | 30 | D | D | | Α | Yes | 2 | (94) | | | |
| Nonyl alcohol (all isomers) | NNS | 20 2 | D | E | 0 | Α | Yes | 1 | | | | |
| Nonyl phenol | NNP | 21 | D | E | | Α | Yes | 1 | | | | |
| Nonyl phenol poly(4+)ethoxylates | NPE | 40 | D | E | | Α | Yes | 1 | | | | |
| Octane (all isomers), see Alkanes (C6-C9) | OAX | 31 | D | С | | Α | Yes | 1 | | | | |
| Octanoic acid (all isomers) | OAY | 4 | D | E | | Α | Yes | 1 | | | | |
| Octanol (all isomers) | ocx | 20 ² | D | E | | Α | Yes | 1 | | | | |
| Octene (all isomers) | OTX | 30 | D | С | | Α | Yes | 2 | | | | |
| Oil, fuel: No. 2 | OTW | 33 | D | D/E | | Α | Yes | 1 | | | | |
| Oil, fuel: No. 2-D | OTD | 33 | D | D | | Α | 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 | | Α. | Yes | 1 | | | | |
| Oil, misc: Diesel | ODS | 33 | D | D/E | | Α. | Yes | 1 | | | | |
| | OLB | 33 | D | E | | | | | | | | |
| Oil, misc: Lubricating | | | D | | | A | Yes | 1 | | | | |
| Oil, misc: Residual | ORL | 33 | | E | | Α | Yes | 1 | | | | |
| Oil, misc: Turbine | ОТВ | 33 | D | E | | Α . | 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 | | Α | Yes | 1 | | | | |
| beta-Pinene | PIP | 30 | D | D | | Α | Yes | 1 | | | | |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether | PAG | 40 | D | E | | Α | Yes | 1 | | | | |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate | PAF | 34 | D | E | | Α | Yes | 1 | | | | |
| Polybutene | PLB | 30 | D | E | | Α | Yes | 1 | | | | |
| Polypropylene glycol | PGC | 40 | D | E | | Α | Yes | 1 | 60 | | | |
| iso-Propyl acetate | IAC | 34 | D | С | | Α | Yes | 1 | | | | |
| n-Propyl acetate | PAT | 34 | D | С | | Α | Yes | 1 | | 11 | | |
| iso-Propyl alcohol | IPA | 20 2 | D | С | | Α | Yes | 1 | • | | | |
| n-Propyl alcohol | PAL | 20 2 | D | С | | Α | Yes | 1 | | | | |
| Propylbenzene (all isomers) | PBY | 32 | D | D | | Α | Yes | 1 | | | | |
| iso-Propylcyclohexane | IPX | 31 | D | D | | Α | Yes | 1 | | | | |
| Propylene glycol | PPG | 20 2 | D | E | | Α | Yes | 1 | | | | |
| Propylene glycol methyl ether acetate | PGN | 34 | D | D | | Α | Yes | 1 | | | | |
| Propylene tetramer | PTT | 30 | D | D | | Α | Yes | 1 | | | | |
| Sulfolane | SFL | 39 | D | E | | Α | Yes | 1 | | | | |
| Tetraethylene glycol | TTG | 40 | D | E | | Α | Yes | 1 | | | | |
| Tetrahydronaphthalene | THN | 32 | D | E | | A | Yes | 1 | | | | |
| Toluene | TOL | 32 | | 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 | | | | |
| | TEG | 40 | D | E | | A | Yes | 1 | | | | |
| Triethyl phosphate | TPS | 34 | D | E | | A | Yes | 1 | | | | |
| Triethyl phosphate | TRE | 32 | D | | | A | | 1 | | | | |
| Trimethylbenzene (all isomers) | TRP | | D | {D} | | | Yes | | | | | |
| Trixylenyl phosphate | | 34 | | | | A | Yes | 1 | | | | |
| Undecene | UDC | 30 | D | D/E | | A | Yes | 1 | | | | |
| 1-Undecyl alcohol | UND | 20 | D | E | | A | Yes | 1 | | | | |
| Xylenes (ortho-, meta-, para-) | XLX | 32 | D | D | | Α | Yes | 1 | | | | |



Serial #: C2-0702494

13-Aug-07



Certificate of Inspection

Cargo Authority Attachment

Page 7 of 7

Shipyard: West Gulf Mari

Hull #: 168

Explanation of terms & symbols used in the Table:

Cargo Identification

Chem Code

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 Note 2

Vessel Name: KIRBY 28050

Official #: 1193005

See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart.

Subchapter Subchapter D 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

A. B. C D, E 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

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

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

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

e required barge full classification for carriage or an expectment succitaper of razardous material range, see 40 CFR 13.10-1.

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).

igned 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 Approved (Y or N) The vessel's tank group (as defined in Section 4) 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

Conditions of Carriage

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

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 IVCS 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 carnot 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. This 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