

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

Certification Date: 30 Aug 2023 Expiration Date: 30 Aug 2028

## **Certificate of Inspection**

For ships on International voyages this cartificate fulfilts the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

| 0.60.0000000000000000000000000000000000  |   |            |   |              | 10-10-12-12      |               |                  |
|--|---|------------|---|--------------|------------------|---------------|------------------|
| Vessel Name  | Official Nun                              | nber       | IMO Numb                                  | er           | Call Sign        | Service       |                  |
| HTCO 3141  | 125878                                    | 8          |   |              |                  | Tank 8        | large            |
|  | g 13 133                                  | 18         | 15 4 8                                    |              | 2012             |               | 52-10-1          |
| Hailing Port   | £L.                                       | 8 Material | Horse                                     |              | Propulsion       |               |                  |
| HOUSTON, TX  |   |            | 1107.000                                  | particular ( | ropalatori       |               |                  |
| · ·  | 51  | teel       |   |              |                  |               |                  |
| UNITED STATES  |   |            |   |              |                  |               |                  |
|  |   | 1155276    |   | 0375         |                  |               | 27 253           |
| Place Built  | Daliver                                   | ry Date    | Keel Laid Date                            | Gross Tons   | Net Tons         | DWT           | Length           |
| ASHLAND CITY, TN   | 18.6                                      | un2015     | 22May2015                                 | R-1619       | R-1619           | 939           | R-297.5          |
| UNITED STATES  | 1000                                      | 3112010    | ZZIMOJZO IO                               | ŀ            |                  | •••           | Ho               |
| UNITED STATES  |   |            |   |              |                  |               |                  |
|  |   |            |   |              |                  |               |                  |
| Owner HIGMAN BARGE LINES   | INC                                       |            | Operato<br>KIRR                           |              | MARINE LP        |               |                  |
| 55 WAUGH DR STE 1000   |   |            |   | MARKET       | 4.               |               |                  |
| HOUSTON, TX 77007  |   |            |   |              | /, TX 77530      |               |                  |
| UNITED STATES  |   |            | UNIT                                      | ED STATE     | S                |               |                  |
|  |   |            |   |              |                  |               |                  |
| This vessel must be mann 0 Certifled Lifeboatmen, 0  |   |            |   |              |                  | thich there m | iust be          |
|  |   |            |   |              | ilers            | 0.00          |                  |
| 0 Masters  | 0 Licensed Mates                          |            | Engineers                                 |              | Juers.           |               |                  |
| 0 Chief Mates<br>0 Second Mates  | First Class Pilots     Radio Officers     |            | Assistant Engineer<br>Ind Assistant Engir |              |                  |               |                  |
| O Second Mates   | 0 Able Seamen                             |            | nd Assistant Enginee<br>Assistant Enginee |              |                  |               |                  |
| 0 Master First Class Pilot   | 0 Ordinary Seamen                         |            | r Assistant Engineers                     | пр           |                  |               |                  |
| 0 Mate First Class Pilots  | 0 Deckhands                               |            | ified Member Engil                        | 1001         |                  |               |                  |
| In addition, this vessel ma  |   |            | -   |              | ne in addition t | o crew, and   | no Others, Total |
| Persons allowed: 0   | y carry or accordance                     | , 0 0010   |   | , 0 1 0101   |                  |               |                  |
| Route Permitted And C  | onditions Of Operat                       | ion:       |   |              |                  |               |                  |
| Lakes, Bays, and   | d Sounds                                  |            |   |              |                  |               |                  |
| Also, in fair weather (<br>Carrabelle, Florida.  | only, coastwise, no                       | t more     | than twelve (                             | 12) miles    | from shore b     | etween St.    | Marks and        |
| This vessel has been quality. If this vessel is be inspected using sall soon as this change in | operated in salt w<br>t water intervals p | ater mi    | re than six n                             | onths in .   | any twelve mo    | nth period,   | the vessel must  |

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

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

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

|        | Annual/Perio | dic/Re-Ins | pection      | This certificate issued by:  |
|--------|--------------|------------|--------------|--|
| Date   | Zone         | A/P/R      | Signature    | This certificate issued by:  Joseph W. Morgan, DR, USCS By Fection |
| 8.9.24 | HOUSTON      | A          | JAKE FRANCIS | Officer in Charge. Merine Inspection                               |
|        |              |            |              | Sector Houston-Galveston   |
|        |              |            |              | Inspection Zone  |



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

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### Certificate of Inspection

Vessel Name: HTCO 3141

Inspection Program (TBSIP). Inspection activities aboard this barge shall be conducted in accordance with its Tank Barge Action Plan. Inspection issues concerning this barge should be directed to OCMI Sector Houston-Galveston.

#### ---Hull Exams---

Exam Type

**Next Exam** 

Last Exam

Prior Exam

DryDock

31Aug2033

17Aug2023

18Jun2015

Internal Structure

31Aug2028

Α

23Aug2023

18Jun2015

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

Authorization:

FLAMMABLE/COMBUSTIBLE LIQUIDS IN 46 CFR TABLE 30.25-1 AND SPECIFIED HAZARDOUS

CARGOES.

**Total Capacity** 

Units

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

32318

Barrels

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       | 918                                    | 13.6                      |
| 2 P/S       | 888                                    | 13.6                      |
| 3 P/S       | 805                                    | 13.6                      |

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

| Hull Type | Maximum Load (short tons) | Maximum Draft<br>(ft/in) | Max Density<br>(lbs/gal) | Route Description |
|-----------|---------------------------|--------------------------|--------------------------|-------------------|
| N .       | 4221                      | 10ft 3in                 | 13.6                     | R, LBS, LC 0-12   |
| III       | 4974                      | 11ft 9in                 | 13.6                     | R, LBS, LC 0-12   |

#### \*Conditions Of Carriage\*

Only those cargoes named in the vessel's Cargo Authority Attachment, Serial No. C1-1404594, dated December 18, 2014, 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 the figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group numbers from the "Compat Group No" column listed in the vessel's Cargo Authority Attachment.

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

In accordance with 46 CFR Part 39, excluding part 39,4000, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter Serial No. C1-1404594, dated 18 December 2014, and has been found acceptable for the collection of bulk liquid cargo vapors annotated with "Yes" in the vessel's Cargo Authority Attachment's (CAA's) VCS column. The VCS system has been approved with a pressure side 1.5 psig P/V valve with Coast Guard Approval 162.017/144/3. The cargo tank top is suitable for a maximum allowable working pressure (MAWP) of 3 psi.

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



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## Certificate of Inspection

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|  | Ins | pec | tion | Staf | us |  |
|--|-----|-----|------|------|----|--|
|--|-----|-----|------|------|----|--|

\*Fuel Tanks\*

Internal Examinations

Tank ID aft

Previous Last Next

18Jun2015

18Jun2015

\*Cargo Tanks\*

aft/slop

| 3       |               |           |            |              |      |      |
|---------|---------------|-----------|------------|--------------|------|------|
|         | Internal Exan | n         |            | External Exa | m    |      |
| Tank Id | Previous      | Last      | Next       | Previous     | Last | Next |
| 1 P/S   | 18Jun2015     | 23Aug2023 | 31Aug2033  | •            | -    | -    |
| 2 P/S   | 15Jun2015     | 23Aug2023 | 31Aug2033  | -            | -    | •    |
| 3 P/S   | 18Jun2015     | 23Aug2023 | 31Aug2033  | -            | •    | -    |
|         |               |           | Hydro Test |              |      |      |
| Tank Id | Safety Valve  | s         | Previous   | Last         | Next |      |
| 1 P/S   | -             |           | -          | 18Jun2015    | -    |      |
| 2 P/S   | -             |           | -          | 18Jun2015    | -    |      |
| 3 P/S   | -             |           | -          | 18Jun2015    | -    |      |

### --- Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

### --- Fire Fighting Equipment ---

Number of Fireman Outfits - 0

### \*Fire Extinguishers - Hand portable and semi-portable\*

Quantity

Class Type

.

40-B

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



# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: HTCO 3141 Shipyard: Trinity Marine, Ashland

City

Hull #: 5087

Dated:

C1-1404594

18-Dec-14

Official #: 1258788

46 CFR 151 Tank Group Characteristics

| Tank Group Information    | Cargo Id | dentificati | on    |    | Cargo       |                     | Tanks |        | Carg<br>Tran  |      | Enviror<br>Control |                   | Special Requirements Fire |   | ments   |             |              |
|---------------------------|----------|-------------|-------|----|-------------|---------------------|-------|--------|---------------|------|--------------------|-------------------|---------------------------|---|---|-------------|--------------|
| Tnk<br>Grp Tanks in Group | Density  | Press.      | Temp. |    | Seg<br>Tank | Туре                | Vent  | Gauge  | Pipe<br>Class | Cont | Tanks              | Handling<br>Space | Protection<br>Provided    | General   | Materials of<br>Construction                                | Elec<br>Haz | Temp<br>Cont |
| A #1P/S, #2P/S, #3P/S     | 13.6     | Atmos.      | Amb.  | II | 1ii<br>2ii  | Integral<br>Gravity | PV    | Closed | II            | G-1  | NR                 | NA                | Portable                  | .50-60, .50-70(a),<br>.50-70(b), .50-73,<br>.50-81(a), .50-<br>81(b), | 55-1(c), (e), (h), 56-<br>1(b), (c), (d), (e), (f),<br>(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 Identificatio  |              | Conditions of Carriage |                |       |              |               |                   |                 |   |                 |
|--|--------------|------------------------|----------------|-------|--------------|---------------|-------------------|-----------------|---|-----------------|
|  |              |                        |                |       |              | _             | Vapor R           | ecovery         |   |                 |
| Name   | Chem<br>Code | Compat<br>Group No     | Sub<br>Chapter | Grade | Hull<br>Type | Tank<br>Group | App'd<br>(Y or N) | VCS<br>Category | Special Requirements in 46 CFR<br>151 General and Mat'ls of | Insp.<br>Period |
| Authorized Subchapter O Cargoes  |              |                        |                |       |              |               |                   |                 |   |                 |
| Acetonitrile   | ATN          | 37                     | 0              | С     | Ш            | Α             | Yes               | 3               | No  | G               |
| Acrylonitrile  | ACN          | 15 <sup>2</sup>        | 0              | С     | Ш            | Α             | Yes               | 4               | .50-70(a), .55-1(e)   | G               |
| Adiponitrile   | ADN          | 37                     | 0              | E     | Ш            | Α             | Yes               | 1               | No  | G               |
| Alkyl(C7-C9) nitrates  | AKN          | 34 <sup>2</sup>        | 0              | NA    | Ш            | Α             | No                | N/A             | .50-81, .50-86  | G               |
| Anthracene oil (Coal tar fraction)   | AHO          | 33                     | 0              | NA    | Ш            | Α             | No                | N/A             | No  | G               |
| Benzene  | BNZ          | 32                     | 0              | С     | Ш            | Α             | Yes               | 1               | .50-60  | G               |
| Benzene or hydrocarbon mixtures (having 10% Benzene or more)                     | BHB          | 32 <sup>2</sup>        | 0              | С     | Ш            | Α             | Yes               | 1               | .50-60  | G               |
| Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)   | ВНА          | 32 <sup>2</sup>        | 0              | С     | III          | 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   | Ш            | Α             | Yes               | 1               | .50-60  | G               |
| Butyl acrylate (all isomers)   | BAR          | 14                     | 0              | D     | Ш            | Α             | Yes               | 2               | .50-70(a), .50-81(a), (b)                                   | G               |
| Butyl methacrylate   | BMH          | 14                     | 0              | D     | Ш            | Α             | Yes               | 2               | .50-70(a), .50-81(a), (b)                                   | G               |
| Butyraldehyde (all isomers)  | BAE          | 19                     | 0              | С     | Ш            | Α             | Yes               | 1               | .55-1(h)  | G               |
| Camphor oil (light)  | CPO          | 18                     | 0              | D     | Ш            | Α             | No                | N/A             | No  | G               |
| Carbon tetrachloride   | CBT          | 36                     | 0              | NA    | Ш            | Α             | No                | N/A             | No  | G               |
| Chemical Oil (refined, containing phenolics)                                     | COD          | 21                     | 0              | Е     | Ш            | Α             | No                | N/A             | .50-73  | G               |
| Chlorobenzene  | CRB          | 36                     | 0              | D     | Ш            | Α             | Yes               | 1               | No  | G               |
| Chloroform   | CRF          | 36                     | 0              | NA    | Ш            | Α             | Yes               | 3               | No  | G               |
| Coal tar naphtha solvent   | NCT          | 33                     | 0              | D     | Ш            | Α             | Yes               | 1               | .50-73  | G               |
| Creosote   | CCW          | 21 <sup>2</sup>        | 0              | Е     | Ш            | Α             | Yes               | 1               | No  | G               |
| Cresols (all isomers)  | CRS          | 21                     | 0              | Е     | Ш            | Α             | Yes               | 1               | No  | G               |
| Crotonaldehyde   | CTA          | 19 <sup>2</sup>        | 0              | С     | П            | Α             | Yes               | 4               | .55-1(h)  | G               |
| Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein) | CHG          |                        | 0              | С     | III          | Α             | Yes               | 1               | No  | G               |
| Cyclohexanone, Cyclohexanol mixture  | CYX          | 18 <sup>2</sup>        | 0              | Е     | Ш            | Α             | Yes               | 1               | .56-1 (b)   | G               |
| Cyclopentadiene, Styrene, Benzene mixture  | CSB          | 30                     | 0              | D     | Ш            | Α             | Yes               | 1               | .50-60, .56-1(b)  | G               |
| iso-Decyl acrylate   | IAI          | 14                     | 0              | Е     | Ш            | Α             | Yes               | 2               | .50-70(a), .50-81(a), (b), .55-1(c)                         | G               |
| 1,1-Dichloroethane   | DCH          | 36                     | 0              | С     | Ш            | Α             | Yes               | 1               | No  | G               |
| Dichloromethane  | DCM          | 36                     | 0              | NA    | Ш            | Α             | Yes               | 5               | No  | G               |
| 1,1-Dichloropropane  | DPB          | 36                     | 0              | С     | Ш            | Α             | Yes               | 3               | No  | G               |
| 1,2-Dichloropropane  | DPP          | 36                     | 0              | С     | Ш            | Α             | Yes               | 3               | No  | G               |
| 1,3-Dichloropropane  | DPC          | 36                     | 0              | С     | Ш            | Α             | Yes               | 3               | No  | G               |
| 1,3-Dichloropropene  | DPU          | 15                     | 0              | D     | Ш            | Α             | Yes               | 4               | No  | G               |



Serial #: C1-1404594 Dated: 18-Dec-14

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: HTCO 3141
Official #: 1258788

Shipyard: Trinity Marine, Ashland City

Page 2 of 7 Hull #: 5087

| Cargo Identification                                  |                     |                          |                     |            |                    |                    |                          | Conditions of Carriage |   |                      |  |  |  |  |
|---|---------------------|--------------------------|---------------------|------------|--------------------|--------------------|--------------------------|------------------------|---|----------------------|--|--|--|--|
|   |                     |                          |                     |            |                    |                    |                          | ecovery                |   |                      |  |  |  |  |
| Name Dichloropropene, Dichloropropane mixtures        | Chem<br>Code<br>DMX | Compat<br>Group No<br>15 | Sub<br>Chapter<br>O | Grade<br>C | Hull<br>Type<br>II | Tank<br>Group<br>A | App'd<br>(Y or N)<br>Yes | VCS<br>Category<br>1   | Special Requirements in 46 CFR<br>151 General and Mat'ls of<br>No | Insp.<br>Period<br>G |  |  |  |  |
| Diethanolamine  | DEA                 | 8                        | 0                   | Е          | Ш                  | Α                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Diethylamine  | DEN                 | 7                        | 0                   | С          | Ш                  | Α                  | Yes                      | 3                      | .55-1(c)  | G                    |  |  |  |  |
| Diethylenetriamine                                    | DET                 | 7 2                      | 0                   | Е          | Ш                  | Α                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Diisobutylamine                                       | DBU                 | 7                        | 0                   | D          | Ш                  | Α                  | Yes                      | 3                      | .55-1(c)  | G                    |  |  |  |  |
| Diisopropanolamine                                    | DIP                 | 8                        | 0                   | Е          | Ш                  | Α                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Diisopropylamine                                      | DIA                 | 7                        | 0                   | С          | Ш                  | Α                  | Yes                      | 3                      | .55-1(c)  | G                    |  |  |  |  |
| N,N-Dimethylacetamide                                 | DAC                 | 10                       | 0                   | Е          | Ш                  | Α                  | Yes                      | 3                      | .56-1(b)  | G                    |  |  |  |  |
| Dimethylethanolamine                                  | DMB                 | 8                        | 0                   | D          | Ш                  | Α                  | Yes                      | 1                      | .56-1(b), (c)   | G                    |  |  |  |  |
| Dimethylformamide                                     | DMF                 | 10                       | 0                   | D          | Ш                  | Α                  | Yes                      | 1                      | .55-1(e)  | G                    |  |  |  |  |
| Di-n-propylamine                                      | DNA                 | 7                        | 0                   | С          | Ш                  | Α                  | Yes                      | 3                      | .55-1(c)  | G                    |  |  |  |  |
| Dodecyldimethylamine, Tetradecyldimethylamine mixture | DOT                 | 7                        | 0                   | E          | III                | Α                  | No                       | N/A                    | .56-1(b)  | G                    |  |  |  |  |
| Dodecyl diphenyl ether disulfonate solution           | DOS                 | 43                       | 0                   | #          | II                 | Α                  | No                       | N/A                    | No  | G                    |  |  |  |  |
| EE Glycol Ether Mixture                               | EEG                 | 40                       | 0                   | <br>D      | III                | Α                  | No                       | N/A                    | No  | G                    |  |  |  |  |
| Ethanolamine  | MEA                 | 8                        | 0                   | E          | III                | A                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Ethyl acrylate  | EAC                 | 14                       | 0                   | С          | III                | A                  | Yes                      | 2                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| Ethylene cyanohydrin                                  | ETC                 | 20                       | 0                   | E          | III                | A                  | Yes                      | 1                      | No  | G                    |  |  |  |  |
| Ethylenediamine                                       | EDA                 | 7 <sup>2</sup>           | 0                   |            | III                | A                  | Yes                      | <u>·</u><br>1          | .55-1(c)  | G                    |  |  |  |  |
| Ethylene dichloride                                   | EDC                 | 36 <sup>2</sup>          | 0                   | С          | III                | A                  | Yes                      | 1                      | No  | G                    |  |  |  |  |
| Ethylene glycol hexyl ether                           | EGH                 | 40                       | 0                   | E          | III                | A                  | No                       | N/A                    | No  | G                    |  |  |  |  |
|   | EGC                 | 40                       | 0                   | D/E        | III                | A                  | Yes                      | 1                      | No  | G                    |  |  |  |  |
| Ethylene glycol monoalkyl ethers                      | EGP                 | 40                       | 0                   | E E        | III                | A                  | Yes                      | 1                      | No  | G                    |  |  |  |  |
| Ethylene glycol propyl ether                          | EAI                 | 14                       | 0                   | E          | III                | A                  | Yes                      | 2                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| 2-Ethylhexyl acrylate                                 | ETM                 | 14                       | 0                   | D/E        | III                | A                  | Yes                      | 2                      | .50-70(a)   | G                    |  |  |  |  |
| Ethyl methacrylate                                    | EPA                 | 19 <sup>2</sup>          | 0                   | E E        | III                | A                  | Yes                      | 1                      | No  | G                    |  |  |  |  |
| 2-Ethyl-3-propylacrolein                              | FMS                 | 19 2                     | 0                   | D/E        | III                | A                  | Yes                      | 1                      | .55-1(h)  | G                    |  |  |  |  |
| Formaldehyde solution (37% to 50%)                    | FFA                 | 19                       | 0                   | D/L        | III                | A                  | Yes                      | 1                      | .55-1(h)  | G                    |  |  |  |  |
| Furfural  Chitaral debute a slution (50% on less)     | GTA                 | 19                       | 0                   | NA NA      | III                | A                  | No                       | N/A                    | No  | G                    |  |  |  |  |
| Glutaraldehyde solution (50% or less)                 | HMC                 | 7                        | 0                   | E          | III                | A                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Hexamethylenediamine solution                         |                     |                          |                     |            |                    |                    |                          |                        | .56-1(b), (c)   | G                    |  |  |  |  |
| Hexamethyleneimine                                    | HMI                 | 7                        | 0                   | С          | II                 | A                  | Yes                      | 1                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| Hydrocarbon 5-9                                       | HFN                 | 20                       | 0                   | С          | III                | A                  | Yes                      | 7                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| Isoprene  | IPR                 | 30                       | 0                   | A          | III                | A                  | Yes                      |                        | .50-70(a), .55-1(c)   | G                    |  |  |  |  |
| Isoprene, Pentadiene mixture                          | IPN                 | 40.2                     | 0                   | В          | III                | Α                  | No                       | N/A                    | No  | G                    |  |  |  |  |
| Mesityl oxide   | MSO                 | 18 <sup>2</sup>          | 0                   | D          | III                | A                  | Yes                      | 1                      |   |                      |  |  |  |  |
| Methyl acrylate                                       | MAM                 |                          | 0                   | С          | III                | Α.                 | Yes                      | 2                      | .50-70(a), .50-81(a), (b)   | G<br>G               |  |  |  |  |
| Methylcyclopentadiene dimer                           | MCK                 | 30                       | 0                   | С          | III                | A                  | Yes                      | 1                      | No  |                      |  |  |  |  |
| Methyl diethanolamine                                 | MDE                 | 8                        | 0                   | E          | III                | A                  | Yes                      | 1                      | .56-1(b), (c)   | G<br>G               |  |  |  |  |
| 2-Methyl-5-ethylpyridine                              | MEP                 | 9                        | 0                   | E          | III                | Α .                | Yes                      | 1                      | .55-1(e)  |                      |  |  |  |  |
| Methyl methacrylate                                   | MMM                 |                          | 0                   | С          | III                | A                  | Yes                      | 2                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| 2-Methylpyridine                                      | MPR                 | 9                        | 0                   | D          | III                | Α                  | Yes                      | 3                      | .55-1(c)  | G                    |  |  |  |  |
| alpha-Methylstyrene                                   | MSR                 | 30                       | 0                   | D          | III                | A                  | Yes                      | 2                      | .50-70(a), .50-81(a), (b)   | G                    |  |  |  |  |
| Morpholine  | MPL                 | 7 2                      | 0                   | D          | III                | Α                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |
| Nitroethane   | NTE                 | 42                       | 0                   | D          | Ш                  | Α                  | No                       | N/A                    | .50-81, .56-1(b)  | G                    |  |  |  |  |
| 1- or 2-Nitropropane                                  | NPM                 | 42                       | 0                   | D          | Ш                  | Α                  | Yes                      | 1                      | .50-81  | G                    |  |  |  |  |
| 1,3-Pentadiene  | PDE                 | 30                       | 0                   | Α          | Ш                  | Α                  | Yes                      | 7                      | .50-70(a), .50-81   | G                    |  |  |  |  |
| Perchloroethylene                                     | PER                 | 36                       | 0                   | NA         | Ш                  | Α                  | No                       | N/A                    |   | G                    |  |  |  |  |
| Polyethylene polyamines                               | PEB                 | 7 2                      | 0                   | Е          | Ш                  | Α                  | Yes                      | 1                      | .55-1(e)  | G                    |  |  |  |  |
| iso-Propanolamine                                     | MPA                 | 8                        | 0                   | E          | Ш                  | Α                  | Yes                      | 1                      | .55-1(c)  | G                    |  |  |  |  |



Serial #: C1-1404594 Dated: 18-Dec-14

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: HTCO 3141

Shipyard: Trinity Marine, Ashland City

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| Cargo Identificatio  | Cargo Identification |                    |                |          |              |               |                   |                 |   |       |
|--|----------------------|--------------------|----------------|----------|--------------|---------------|-------------------|-----------------|---|-------|
|  |                      | _                  |                |          |              |               | Vapor R           |                 |   |       |
| Name   | Chem                 | Compat<br>Group No | Sub<br>Chapter | Grade    | Hull<br>Type | Tank<br>Group | App'd<br>(Y or N) | VCS<br>Category | Special Requirements in 46 CFR<br>151 General and Mat'ls of | Insp. |
| Propanolamine (iso-, n-)   | PAX                  | 8                  | 0              | Е        | Ш            | Α             | Yes               | 1               | .56-1(b), (c)   | G     |
| iso-Propylamine  | IPP                  | 7                  | 0              | Α        | II           | Α             | Yes               | 5               | .55-1(c)  | G     |
| Pyridine   | PRD                  | 9                  | 0              | С        | Ш            | Α             | Yes               | 1               | .55-1(e)  | G     |
| Sodium chlorate solution (50% or less)   | SDD                  | 0 1,2              | 0              | NA       | Ш            | Α             | No                | N/A             | .50-73  | G     |
| Styrene (crude)  | STX                  | 30                 | 0              | D        | Ш            | Α             | Yes               | 2               | No  | G     |
| Styrene monomer  | STY                  | 30                 | 0              | D        | Ш            | Α             | Yes               | 2               | .50-70(a), .50-81(a), (b)                                   | G     |
| 1,1,2,2-Tetrachloroethane  | TEC                  | 36                 | 0              | NA       | Ш            | Α             | No                | N/A             | No  | G     |
| Tetraethylenepentamine   | TTP                  | 7                  | 0              | Е        | Ш            | Α             | Yes               | 1               | .55-1(c)  | G     |
| Tetrahydrofuran  | THF                  | 41                 | 0              | С        | Ш            | Α             | Yes               | 1               | .50-70(b)   | G     |
| 1,2,4-Trichlorobenzene   | TCB                  | 36                 | 0              | Е        | Ш            | Α             | Yes               | 1               | No  | G     |
| Trichloroethylene  | TCL                  | 36 <sup>2</sup>    | 0              | NA       | Ш            | Α             | Yes               | 1               | No  | G     |
| Triethylamine  | TEN                  | 7                  | 0              | С        | Ш            | Α             | Yes               | 3               | .55-1(e)  | G     |
| Urea, Ammonium nitrate solution (containing more than 2% NH3)  | UAS                  | 6                  | 0              | NA       | Ш            | Α             | No                | N/A             | .56-1(b)  | G     |
| Vinyl acetate  | VAM                  | 13                 | 0              | С        | Ш            | Α             | Yes               | 2               | .50-70(a), .50-81(a), (b)                                   | G     |
| Vinyl neodecanate  | VND                  | 13                 | 0              | Е        | Ш            | Α             | No                | N/A             | .50-70(a), .50-81(a), (b)                                   | G     |
| Subchapter D Cargoes Authorized for Vapor Contr  | ol                   |                    |                |          |              |               |                   |                 |   |       |
| Acetone  | ACT                  | 18 <sup>2</sup>    | D              | С        |              | Α             | Yes               | 1               |   |       |
| Acetophenone   | ACP                  | 18                 | D              | Е        |              | Α             | Yes               | 1               |   |       |
| Alcohol(C12-C16) poly(1-6)ethoxylates  | APU                  | 20                 | D              | Е        |              | Α             | Yes               | 1               |   |       |
| Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates   | AEB                  | 20                 | D              | Е        |              | Α             | Yes               | 1               |   |       |
| Amyl acetate (all isomers)   | AEC                  | 34                 | D              | D        |              | Α             | Yes               | 1               |   |       |
| Amyl alcohol (iso-, n-, sec-, primary)   | AAI                  | 20                 | D              | D        |              | Α             | Yes               | 1               |   |       |
| Benzyl alcohol   | BAL                  | 21                 | D              | Е        |              | Α             | Yes               | 1               |   |       |
| Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and | BFX                  | 20                 | D              | Е        |              | Α             | Yes               | 1               |   |       |
| their borate esters) Butyl acetate (all isomers)   | BAX                  | 34                 | D              | D        |              | Α             | Yes               | 1               |   |       |
|  | IAL                  | 20 <sup>2</sup>    | D              | D        |              | A             | Yes               | 1               |   |       |
| Butyl alcohol (iso-)   | BAN                  | 20 <sup>2</sup>    | D              | D        |              | A             | Yes               | 1               |   |       |
| Butyl alcohol (n-)   | BAS                  | 20 <sup>2</sup>    | D              | C        |              | A             | Yes               | 1               |   |       |
| Butyl alcohol (sec-)   | BAT                  | 20 <sup>2</sup>    | D              | С        |              | A             | Yes               | 1               |   |       |
| Butyl alcohol (tert-)  | BPH                  | 34                 | D              | E        |              | A             | Yes               | 1               |   |       |
| Butyl benzyl phthalate   | BUE                  | 32                 | D              | D        |              | A             | Yes               | 1               |   |       |
| Butyl toluene Convolutions   | CLS                  | 22                 | D D            | E        |              | A             | Yes               | 1               |   |       |
| Caprolactam solutions  |                      |                    |                |          |              |               |                   |                 |   |       |
| Cyclohexane  | CHX                  | 31                 | D              | С        |              | A             | Yes               | 1               |   |       |
| Cyclohexanol   | CHN                  | 20                 | D              | E<br>D/E |              | A             | Yes               | 1               |   |       |
| 1,3-Cyclopentadiene dimer (molten)   | CPD                  | 30                 | D              | D/E<br>D |              | Α             | Yes               | 1               |   |       |
| p-Cymene   | CMP                  | 32                 | D              |          |              | A             | Yes               |                 |   |       |
| iso-Decaldehyde  | IDA                  | 19                 | D              | E        |              | Α             | Yes               | 1               |   |       |
| n-Decaldehyde  | DAL                  | 19                 | D              | E        |              | A             | Yes               | 1               |   |       |
| Decene  Decene   | DCE                  | 30                 | D              | D        |              | Α             | Yes               | 1               |   |       |
| Decyl alcohol (all isomers)  | DAX                  | 20 <sup>2</sup>    | D              | E        |              | A             | Yes               | 1               |   |       |
| n-Decylbenzene, see Alkyl(C9+)benzenes   | DBZ                  | 32                 | D              | E        |              | A             | Yes               | 1               |   |       |
| Diacetone alcohol  | DAA                  | 20 <sup>2</sup>    | 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 <sup>2</sup>    | D              | E        |              | A             | Yes               | 1               |   |       |
| Diisobutylene  | DBL                  | 30                 | D              | С        |              | Α             | Yes               | 1               |   |       |



erial #: C1-1404594 Dated: 18-Dec-14

# Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: HTCO 3141
Official #: 1258788

Shipyard: Trinity Marine, Ashland City

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| Cargo Identification  | on                  |                          |                     |            |              | Conditions of Carriage |                          |                      |   |                 |  |
|---|---------------------|--------------------------|---------------------|------------|--------------|------------------------|--------------------------|----------------------|---|-----------------|--|
|   |                     |                          |                     |            |              |                        | I                        | Recovery             |   |                 |  |
| Name<br>Diisobutyl ketone   | Chem<br>Code<br>DIK | Compat<br>Group No<br>18 | Sub<br>Chapter<br>D | Grade<br>D | Hull<br>Type | Tank<br>Group<br>A     | App'd<br>(Y or N)<br>Yes | VCS<br>Category<br>1 | Special Requirements in 46 CFR<br>151 General and Mat'ls of | Insp.<br>Period |  |
| Diisopropylbenzene (all isomers)  | DIX                 | 32                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dimethyl phthalate  | DTL                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dioctyl phthalate   | DOP                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dipentene   | DPN                 | 30                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Diphenyl  | DIL                 | 32                       | D                   | D/E        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Diphenyl, Diphenyl ether mixtures   | DDO                 | 33                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Diphenyl ether  | DPE                 | 41                       | D                   | {E}        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dipropylene glycol  | DPG                 | 40                       | D                   | E          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Distillates: Flashed feed stocks  | DFF                 | 33                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Distillates: Straight run   | DSR                 | 33                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dodecene (all isomers)  | DOZ                 | 30                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Dodecylbenzene, see Alkyl(C9+)benzenes                                    | DDB                 | 32                       | D                   | E          |              | Α                      | 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 <sup>2</sup>          | 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          |              | A                      | Yes                      | 1                    |   |                 |  |
| Ethyl cyclohexane   | ECY                 | 31                       | D                   | D          |              | A                      | Yes                      | 1                    |   |                 |  |
| Ethylene glycol   | EGL                 | 20 <sup>2</sup>          | D                   | E          |              | A                      | Yes                      | 1                    |   |                 |  |
| Ethylene glycol butyl ether acetate                                       | EMA                 | 34                       | D                   | E          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Ethylene glycol diacetate   | EGY                 | 34                       | D                   | E          |              | A                      | Yes                      | 1                    |   |                 |  |
| Ethylene glycol phenyl ether  | EPE                 | 40                       |                     | E          |              | A                      | Yes                      | 1                    |   |                 |  |
| Ethyl-3-ethoxypropionate  | EEP                 | 34                       | D                   | D          |              | A                      | Yes                      | 1                    |   |                 |  |
| 2-Ethylhexanol  | EHX                 | 20                       |                     | 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 <sup>2</sup>          | D                   | E          |              | A                      | Yes                      | 1                    |   |                 |  |
| Gasoline blending stocks: Alkylates                                       | GAK                 | 33                       | D                   | A/C        |              | A                      | Yes                      | <u>·</u><br>1        |   |                 |  |
| Gasoline blending stocks: Arkylates  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          |              | A                      | Yes                      | 1                    |   |                 |  |
| Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)   | GAV                 | 33                       | D                   | С          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Gasolines: Casinghead (natural)   | GCS                 | 33                       | D                   | A/C        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Gasolines: Polymer  | GPL                 | 33                       | D                   | A/C        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Gasolines: Straight run   | GSR                 | 33                       | D                   | A/C        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Glycerine   | GCR                 | 20 <sup>2</sup>          | D                   | E          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Heptane (all isomers), see Alkanes (C6-C9) (all isomers)                  | HMX                 | 31                       |                     | C          |              | A                      | Yes                      | 1                    |   |                 |  |
| Heptanoic acid  | HEP                 | 4                        | D                   | E          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Heptanol (all isomers)  | HTX                 | 20                       | D                   | D/E        |              | A                      | Yes                      | 1                    |   |                 |  |
| Heptene (all isomers)   | HPX                 | 30                       | D                   | C          |              | Α                      | Yes                      | 2                    |   |                 |  |
| Heptyl acetate  | HPE                 | 34                       | D                   | E          |              | A                      | Yes                      | 1                    |   |                 |  |
| Hexane (all isomers), see Alkanes (C6-C9)                                 | HXS                 | 31 <sup>2</sup>          | D                   | B/C        |              | A                      | Yes                      | 1                    |   |                 |  |
| i levalle (all isoliteis), see Alkalles (CO-CS)                           | IIVO                | J1 -                     | U                   | טום        |              | А                      | 162                      | ı                    |   |                 |  |



Serial #: C1-1404594 Dated: 18-Dec-14

# Certificate of Inspection

## Cargo Authority Attachment

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Vessel Name: HTCO 3141
Official #: 1258788

Shipyard: Trinity Marine, Ashland City

Hull #: 5087

| Cargo Identificatio                        | n            |                    |                |       |              |                | Conditions of Carriage |          |   |                 |  |  |  |
|--|--------------|--------------------|----------------|-------|--------------|----------------|------------------------|----------|---|-----------------|--|--|--|
|  |              |                    |                |       |              | Vapor Recovery |                        |          |   |                 |  |  |  |
| Name                                       | Chem<br>Code | Compat<br>Group No | Sub<br>Chapter | Grade | Hull<br>Type | Tank<br>Group  | App'd<br>(Y or N)      | VCS      | Special Requirements in 46 CFR<br>151 General and Mat'ls of | Insp.<br>Period |  |  |  |
| Hexanoic acid                              | HXO          | 4                  | D              | E     | IVDE         | A              | Yes                    | 1        | 1131 General and Matis Of                                   | Perion          |  |  |  |
| Hexanol                                    | HXN          | 20                 | D              | D     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Hexene (all isomers)                       | HEX          | 30                 | D              | С     |              | Α              | Yes                    | 2        |   |                 |  |  |  |
| Hexylene glycol                            | HXG          | 20                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Isophorone                                 | IPH          | 18 <sup>2</sup>    | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Jet fuel: JP-4                             | JPF          | 33                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Jet fuel: JP-5 (kerosene, heavy)           | JPV          | 33                 | D              | D     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Kerosene                                   | KRS          | 33                 | D              | D     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Methyl acetate                             | MTT          | 34                 | D              | D     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Methyl alcohol                             | MAL          | 20 <sup>2</sup>    | D              | С     |              | Α              | 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 <sup>2</sup>    | D              | С     |              | A              | Yes                    | 1        |   |                 |  |  |  |
|  | MBK          | 18                 | D              | С     |              | A              | Yes                    | 1        |   |                 |  |  |  |
| Methyl butyrete                            | MBU          | 34                 | D              | С     |              | A              | Yes                    | 1        |   |                 |  |  |  |
| Methyl butyrate                            | MEK          | 18 <sup>2</sup>    | D              | С     |              | A              | Yes                    | 1        |   |                 |  |  |  |
| Methyl bentyl ketone                       | MHK          | 18                 | D              | D     |              | A              | Yes                    | 1        |   |                 |  |  |  |
| Methyl heptyl ketone                       | MIK          | 18 <sup>2</sup>    | D              | С     |              | A              |                        | 1        |   |                 |  |  |  |
| Methyl isobutyl ketone                     |              |                    |                |       |              |                | Yes                    | 1        |   |                 |  |  |  |
| Methyl naphthalene (molten)                | MNA          | 32                 | D              | E     |              | A              | Yes                    | •        |   |                 |  |  |  |
| Mineral spirits                            | MNS          | 33                 | D              | D     |              | Α              | 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     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Naphtha: Stoddard solvent                  | NSS          | 33                 | D              | D     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| 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        |   |                 |  |  |  |
| Nonyl alcohol (all isomers)                | NNS          | 20 <sup>2</sup>    | D              | E     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Nonyl phenol                               | NNP          | 21                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Nonyl phenol poly(4+)ethoxylates           | NPE          | 40                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Octane (all isomers), see Alkanes (C6-C9)  | OAX          | 31                 | D              | С     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Octanoic acid (all isomers)                | OAY          | 4                  | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Octanol (all isomers)                      | OCX          | 20 <sup>2</sup>    | D              | Е     |              | 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   |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, fuel: No. 5                           | OFV          | 33                 | D              | D/E   |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, fuel: No. 6                           | OSX          | 33                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Crude                           | OIL          | 33                 | D              | A/D   |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Diesel                          | ODS          | 33                 | D              | D/E   |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Gas, high pour                  | OGP          | 33                 | D              | E     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Lubricating                     | OLB          | 33                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Residual                        | ORL          | 33                 | D              | Е     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Oil, misc: Turbine                         | ОТВ          | 33                 | D              | E     |              | Α              | Yes                    | 1        |   |                 |  |  |  |
| Pentane (all isomers)                      | PTY          | 31                 | D              | A     |              | A              | Yes                    | 5        |   |                 |  |  |  |
| i omano (ali isomeis)                      |              | 01                 |                | /\    |              | ,,             | 103                    | <u> </u> |   |                 |  |  |  |



Dated: 18-Dec-14

# Certificate of Inspection

### Cargo Authority Attachment

Vessel Name: HTCO 3141

Shipyard: Trinity Marine,

Ashland City

 Hull #: 5087

| Cargo Identification                                    |                     |                          |                     |            |              | Conditions of Carriage |                          |                      |   |                 |  |
|---|---------------------|--------------------------|---------------------|------------|--------------|------------------------|--------------------------|----------------------|---|-----------------|--|
|   |                     |                          |                     |            |              |                        | Vapor Recovery           |                      |   |                 |  |
| Name Pentene (all isomers)                              | Chem<br>Code<br>PTX | Compat<br>Group No<br>30 | Sub<br>Chapter<br>D | Grade<br>A | Hull<br>Type | Tank<br>Group<br>A     | App'd<br>(Y or N)<br>Yes | VCS<br>Category<br>5 | Special Requirements in 46 CFR<br>151 General and Mat'ls of | Insp.<br>Period |  |
| n-Pentyl propionate                                     | PPE                 | 34                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| alpha-Pinene  | PIO                 | 30                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| beta-Pinene   | PIP                 | 30                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether         | PAG                 | 40                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate | PAF                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Polybutene  | PLB                 | 30                       | D                   | E          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Polypropylene glycol                                    | PGC                 | 40                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| iso-Propyl acetate                                      | IAC                 | 34                       | D                   | С          |              | Α                      | Yes                      | 1                    |   |                 |  |
| n-Propyl acetate  | PAT                 | 34                       | D                   | С          |              | Α                      | Yes                      | 1                    |   |                 |  |
| iso-Propyl alcohol                                      | IPA                 | 20 <sup>2</sup>          | D                   | С          |              | Α                      | Yes                      | 1                    |   |                 |  |
| n-Propyl alcohol  | PAL                 | 20 <sup>2</sup>          | 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 <sup>2</sup>          | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Propylene glycol methyl ether acetate                   | PGN                 | 34                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Propylene tetramer                                      | PTT                 | 30                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Sulfolane   | SFL                 | 39                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Tetraethylene glycol                                    | TTG                 | 40                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Tetrahydronaphthalene                                   | THN                 | 32                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Toluene   | TOL                 | 32                       | D                   | С          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Tricresyl phosphate (less than 1% of the ortho isomer)  | TCP                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Triethylbenzene   | TEB                 | 32                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Triethylene glycol                                      | TEG                 | 40                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Triethyl phosphate                                      | TPS                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Trimethylbenzene (all isomers)                          | TRE                 | 32                       | D                   | {D}        |              | Α                      | Yes                      | 1                    |   |                 |  |
| Trixylenyl phosphate                                    | TRP                 | 34                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Undecene  | UDC                 | 30                       | D                   | D/E        | -            | Α                      | Yes                      | 1                    |   |                 |  |
| 1-Undecyl alcohol                                       | UND                 | 20                       | D                   | Е          |              | Α                      | Yes                      | 1                    |   |                 |  |
| Xylenes (ortho-, meta-, para-)                          | XLX                 | 32                       | D                   | D          |              | Α                      | Yes                      | 1                    |   |                 |  |

Serial #: C1-1404594

18-Dec-14

Dated:



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: HTCO 3141 Shipyard: Trinity Marine,

Official #: 1258788 Hull #: 5087

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

Cargo Identification

Chem Code

Compatability Group No

Note 1 Note 2

Subchapter Subchapter D

Subchapter O Note 3

Grade

A, B, C

Note 4 NA

Hull Type

NA

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.

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 (202) 372-1425.

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

The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified. Those flammable and combustible liquids listed in 46 CFR Table 30.25-1

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

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

The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.

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

The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.

Those subchapter O cargoes which are not classified as a flammable or combustible liquid.

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

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

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

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

Not applicable to barges certificated under Subchapter D

#### Conditions of Carriage

Tank Group Vapor Recovery Approved (Y or N) The vessel's tank group (as defined in Section 4) which is authorized for 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:

Category 1

The specified cargo's provisional classification for vapor control systems.

(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates.

Category 2

(Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety componenets and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation

Category 3

(Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overfill protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1.

Category 4

(Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3,

Category 5

(High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 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. (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5,

Category 7

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