

**Vacuum/Pneumatic Truck Authorization**  
**Marathon Petroleum Company LP - Galveston Bay Refinery**

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Type of Truck:     Pneumatic     Vacuum

Date: \_\_\_\_\_ W.O. No.: \_\_\_\_\_ Time: \_\_\_\_\_ Permit No.: \_\_\_\_\_

**Section A - Must be Completed by Unit Requesting Vacuum/Pneumatic Truck Prior to Loading**

Placards Required:             Yes     No

Previous Material Loaded: \_\_\_\_\_

Vacuum Truck Log Verified:     Yes     No

Material to be Picked Up Compatible with Previous Load:     Yes     No    If No, Documentation of Wash Out Must be Attached.

Truck Water Washed:             Yes     No

Truck Steam Washed:             Yes     No

**Note:** Chemical Hazards and PPE Requirements for Loading at the Originating Unit Must be Identified on the Permit. The SDS Must be Attached to the Permit.

Contractor Company Name: \_\_\_\_\_

Generating Process Unit: \_\_\_\_\_ Contact Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Job Description: \_\_\_\_\_

Job Location: \_\_\_\_\_

Material/Product/Waste Description: \_\_\_\_\_ Estimated Amount: \_\_\_\_\_

Equipment ID: \_\_\_\_\_

Equipment Service: \_\_\_\_\_

Maximum Material/Product Temperature: \_\_\_\_\_

If Material Description is Unknown, the Test Results are:    Actual RVP: \_\_\_\_\_

Destination/Disposal Site - Determined by Originating Dept. and Environmental Facility (X1299): \_\_\_\_\_

Destination/Disposal Site: \_\_\_\_\_

Originating Dept. Rep. Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Prior to loading pyrophoric, oxidizing materials, acids, caustics, or combustible solids/dusts, approval must be obtained from the Originating Dept. Supv.**

Originating Dept. Supv.: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section B - Completed by Unit Receiving Delivery**

**Personal Protective Equipment (PPE) [Check the Appropriate Items]:**

<p><b>Unload:</b></p> <p><input type="checkbox"/> Respirator: Type _____</p> <p><input type="checkbox"/> Self Contained Unit</p> <p><input type="checkbox"/> Face Shield</p> <p><input type="checkbox"/> Chemical Resistant Gloves</p> <p><input type="checkbox"/> Other: _____</p>	<p><b>Unload</b></p> <p><input type="checkbox"/> Hose Line Unit</p> <p><input type="checkbox"/> Chemical Goggles</p> <p><input type="checkbox"/> Chemical Resistant Suit</p> <p><input type="checkbox"/> Chemical Resistant Boots</p>
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Receiving Dept. Rep. Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Truck Operator Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Truck Number: \_\_\_\_\_

**Prior to unloading pyrophoric, oxidizing materials, acids, caustics, or combustible solids/dusts, approval must be obtained from the Receiving Dept. Supv.**

Receiving Dept. Supv.: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Emergency Information**  
**Operations should be notified immediately of all emergency situations.**  
**Fire/Spill/Medical Emergency contact ext. 1911**  
**Main Gate contact 409-945-1762 or 409-945-1765**  
**CHEMTREC contact 1-800-424-9300 (If spill occurs on a public roadway)**

- Vacuum/Pneumatic Truck Authorization Form**
- A. The Vacuum/Pneumatic Truck Authorization Form will be generated by the originating area. Section A of the form must be completely filled out prior to loading any material in a vacuum or pneumatic truck.
  - B. The top soft copy (white) of the form is for disposal of the material. This copy will be given to the vacuum/pneumatic truck operator. The vacuum/pneumatic truck operator will give this copy of the form to the receiving area representative when initially checking in, prior to the first unloading. This copy will be good for multiple loading/unloading as long as the conditions (i.e., driver, truck, site or material) do not change. Also, if using multiple drivers/trucks to load/unload the same material, a form must be filled out for each truck/driver. Each time a truck enters or exits an operating unit, the driver must check in at the unit's control room.
  - C. The top soft copy (yellow) is for the vacuum/pneumatic truck operator.
  - D. The bottom hard copy will be retained by the receiving unit, and sent to the Environmental Waste Team.

**Materials Known to Have an RVP <= 9.0**

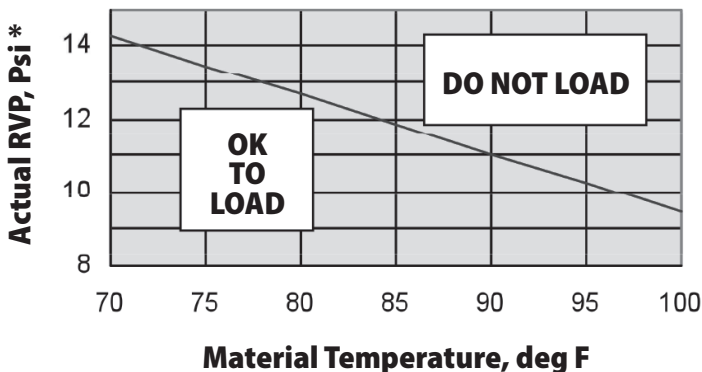
- |                                |                                       |                                   |                              |
|--------------------------------|---------------------------------------|-----------------------------------|------------------------------|
| Benzene                        | Heavy Coker Naphtha                   | Light DDU Distillate              | RHU Feed                     |
| Benzene/Ethylbenzene           | Heavy Distillates                     | Light Gas Oil                     | RX-107                       |
| Cat Feed Hydrotreated Gas Oils | Heavy Heavy Coker Gas Oil             | Light Hydrotreated Distillate     | 3S-Overhead                  |
| Coker Furnace Charge           | Heavy Heavy Vacuum Gas Oil            | Light Hydrotreated Gas Oil        | Seal Oil                     |
| Coker Naphtha                  | Heavy Hydrotreated Naphtha            | Light Hydrotreated Vacuum Naphtha | Skimmed Oil to Tk 1004       |
| Crude Benzene                  | Heavy Raffinate                       | Light Ultracrackate               | Slurry                       |
| Crude Ethylbenzene             | Heavy Ultracrackate                   | Light Ultraformate                | SN-Regular                   |
| Crude Ethylbenzene/Benzene     | Heavy Ultraformate                    | Light Virgin Distillate           | Sponge Oil                   |
| Decanted Alkylate              | Heavy Vacuum Gas Oil                  | Light Vacuum Gas Oil              | Sour Naphtha                 |
| Decanted Oil                   | Heavy Virgin Naphtha                  | Low Sulfur Gas Oil                | Toluene                      |
| Desulfurizer Feed              | High Sulfur Gas Oil                   | Mid Hydrotreated Distillate       | Total Raffinate              |
| Deisohexanizer Bottoms         | High Temperature Separator Liquid     | Mid Temperature Separator Liquid  | Total Ultraformate           |
| Diesel                         | Hydrotreated Atmospheric Tower Bottom | Mid Virgin Distillate             | Utility Gas Oil              |
| Ethylbenzene                   | Hydrotreated Resid                    | Mixed Distillates                 | Vacuum Hydrotreated Naphtha  |
| No. 2 Fuel Oil                 | Intermediate Hydrotreated Naphtha     | Nitration Grade Benzene           | Vacuum Naphtha               |
| No. 6 Fuel Oil                 | Intermediate Virgin Naphtha           | Polymer                           | Wash Oil                     |
| Gas Oil Mixtures               | JP4                                   | PX Light Benzene                  | Wild Hydrotreated Distillate |
| Heavy Aromatic                 | Jet Fuel A/JP5                        | Recycle Oil                       | Xylene                       |
| Heavy Cat Cycle Oil            | Kerosene                              | Reject Hydrocarbons               | Xylene/Ethylbenzene          |
| Heavy Coker Gas Oil            | Light Cat Cycle Oil                   | Resid Hydrotreated Gas Oil        |                              |
| Heavy Cat Naphtha              | Light Coker Distillate                | Rich Sponge Oil                   |                              |

**Finished Products Temperature Criteria Graph**

With the known material temperature, the maximum RVP can be calculated as follows:

**Maximum RVP = 25.446 - 0.160 \* Material Temperature**

**Material Temperature vs. Maximum RVP**

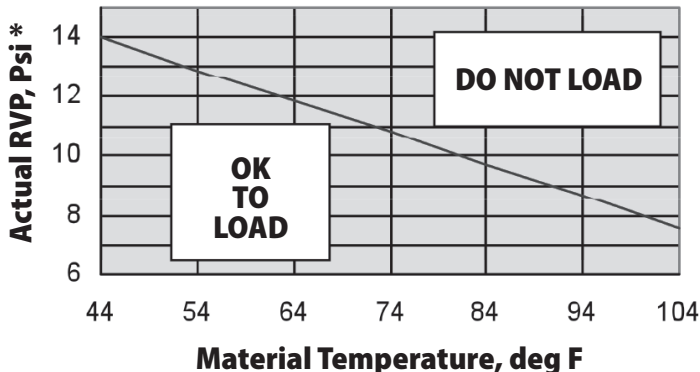


**Crude Oil Temperature Criteria Graph**

With the known material temperature, the maximum RVP can be calculated as follows:

**Maximum RVP = 18.625 - 0.106 \* Material Temperature**

**Material Temperature vs. Maximum RVP**



\* Actual Reid Vapor Pressure (RVP) in Psi as measured by the Lab

**Chemical Interaction Matrix Chart**

	ACIDS	BASES	HYDROCARBONS	OXIDIZERS	SPENT CATALYST
ACIDS	No Reaction	Generates heat, corrosive, generates gas (pressure build-up), potential for explosive reaction, toxic	Generates heat (polymerizes HCs), generates gas (pressure build-up), toxic, can cause burns	Generates heat, potential for explosive reaction, generates gas (pressure build-up), toxic	Generates heat, can boil/splatter, can release H2S
BASES	Generates heat, corrosive, generates gas (pressure build-up), potential for explosive reaction, toxic	No Reaction	No Reaction	Generates heat, corrosive, generates gas (pressure build-up), potential for explosive reaction, toxic	Potential to release heat, possibly H2S
HYDROCARBONS	Generates heat (polymerizes HCs), generates gas (pressure build-up), toxic, can cause burns	No Reaction	No Reaction	Generates heat, generates gas (pressure build-up), flammable, potential for explosive reaction, toxic	No Reaction
OXIDIZERS	Generates heat, potential for explosive reaction, generates gas (pressure build-up), toxic	Generates heat, corrosive, generates gas (pressure build-up), potential for explosive reaction, toxic	Generates heat, generates gas (pressure build-up), flammable, potential for explosive reaction, toxic	No Reaction	Can burn and release harmful vapors (SO2, NOx, CO, CO2)
SPENT CATALYST	Generates heat, can boil/splatter, can release H2S	Potential to release heat, possibly H2S	No Reaction	Can burn and release harmful vapors (SO2, NOx, CO, CO2)	No Reaction

**Refinery Examples of Acids, Bases and Oxidizers**

Acids	Bases	Oxidizers
Hydrofluoric Acid (HF)	Caustic (NaOH)	Air
Hydrochloric Acid (HCL)	Soda Ash (Na <sub>2</sub> CO <sub>3</sub> )	Oxygen (O <sub>2</sub> )
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Amines (e.g., diethanolamine DEA))	Potassium Permanganate (KMnO <sub>4</sub> )
Phosphoric Acid Catalyst (H <sub>3</sub> PO <sub>4</sub> )	Sodium Polysulfide (Na <sub>2</sub> S <sub>x</sub> )	Sodium Hypochlorite (bleach) (NaOCl)