



The Martinez Refining Company LLC (MRC) [formerly Shell Oil Products U.S. Martinez Refiner] is on approximately 880 acres in Contra Costa County, partially within the city boundaries of Martinez, CA. The 24-hour plant reportedly has 720 full time employees with an additional 200 contractors on site to perform contract work. MRC is on industrial property. Land use surrounding MRC is a combination of industrial, open space, environmental conservation, and residential. MRC processes about 165,000 barrels (1 barrel = 42 gallons) of crude oil for conversion into gasoline, jet fuel, diesel, and asphalt products. The plant produces enough gasoline to fill 252,000 cars, enough diesel to fill 13,125 18-wheel trucks, and enough jet fuel to fill 21 jets (747's) per day.

Hazardous Substances Stored or Produced Onsite and their Immediate Health Effects

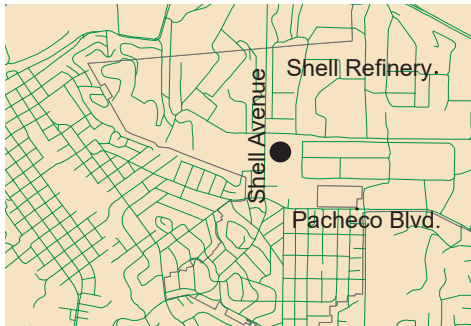
- **Flammable Gases:** May be a mild irritant to throat, nose, and lungs. May cause discomfort to eyes.
- **Hydrogen Sulfide:** Colorless, rotten egg smelling, corrosive and toxic gas. May irritate nose, throat, and lungs. Causes headaches, dizziness, and difficulty in breathing.
- **Aqueous Ammonia:** colorless liquid with pungent odor. May cause nausea, breathing difficulty and convulsions. Made by dissolving anhydrous ammonia in water.
- **Anhydrous Ammonia:** Colorless, corrosive, irritating gas. Has a sharp suffocating odor. Inhalation can cause irritation in nose, throat, and lungs. May cause shortness of breath, headache, nausea and vomiting.

3-year Accident History (Last updated December 2021)

7/6/2018: Two process upsets and mechanical failure in the flare system lead to the release of unburned flammable materials through the Light Oil Processing Flare. The release of unburned flare gas continued for approximately 45 minutes. The event was classified as a Community Warning System (CWS) Level 2 event. Contra Costa Health Services Hazardous Materials Programs and Bay Area Air Quality Management District were notified. Neither the ground level monitors located at the facility fence-line nor community sampling detected any offsite readings of H2S or SO2 above background levels. No community complaints of odors or impacts were received.

Safety Features and Recent Improvements (updated June 2021):

- Eliminated unnecessary, non-essential piping that could lead to leakage. Upgraded metallurgy of select piping and equipment to better resist corrosion. Expanded car seal checklists to include additional valves. Added additional process alarms and ammonia area monitors.



Summary of Most Recent Audit (February 2021):

Contra Costa Health Services Hazardous Materials Program (CCHSHMP) audited and verified that most of the programs required under the California Accidental Release Prevention (CalARP) and the County Industrial Safety Ordinance (ISO) have been created and are being implemented. The facility has an effective preventive maintenance program and retains up to date process safety information on their process equipment. The facility needs to consistently conduct emergency drills within each operating plant, improve documentation of periodic field audits for on-site contractors, and conduct safety culture assessments that include evaluation of all elements of process safety leadership listed in CalARP and ISO. Significant improvement is needed in documenting studies associated with inherently safer design assessments to verify equipment improvements are designed with safer alternatives.

For more information:

Copies of the latest audit findings, Risk Management Plan, and Safety Plan can be found in the following locations:

CCHS Hazardous Materials Programs Office
4585 Pacheco Blvd., Suite 100, Martinez, CA 94553

Martinez Library
740 Court St. Martinez, CA 94553

Visit our website at cchealth.org/groups/hazmat or call 925-655-3200.

