

- (d) Reforming (catalytic reforming)—the rearrangement of molecules in a naphtha boiling range material to form higher octane aromatics (i.e., improved antiknock quality at the expense of gasoline yield). A main product is catalytic reformat, a blend component for gasoline. Hydrogen is another by-product;
- (e) Alkylation—a process whereby a high-octane blending component for gasolines is derived from catalytic combination of an isoparaffin and an olefin;
- (f) Cracking—a refining process involving decomposition and molecular recombination of organic compounds, especially hydrocarbons obtained by means of heat, to form molecules suitable for motor fuels, monomers, petrochemicals, etc.:
  - (i) Thermal cracking—exposes the distillate to temperatures of approximately 540° C to 650° C for varying periods of time. Process produces modest yields of gasoline and higher yields of residual products for fuel oil blending;
  - (ii) Catalytic cracking—hydrocarbon vapors are passed at approximately 400° C over a metallic catalyst (e.g., silica-alumina or platinum); the complex recombinations (alkylation, polymerization, isomerization, etc.) occur within seconds to yield high-octane gasoline. Process yields less residual oils and light gases than thermal cracking;
- (g) Coking—a thermal cracking process for the conversion of heavy low-grade products, such as reduced crude, straight run pitch, cracked tars and shale oil, into solid coke (carbon) and lower boiling hydrocarbon products which are suitable as feed for other refinery units for conversion into lighter products; or
- (h) Isomerization—the refinery process of converting petroleum compounds into their isomers.”

3. TCR 4 for chapter 27 is deleted and the following new TCRs are inserted in lieu thereof:

- “4. (A) A change to heading 2710 from any other heading, except from headings 2711 through 2715; or
  - (B) Production of any good of heading 2710 as the result of atmospheric distillation, vacuum distillation, catalytic hydroprocessing, catalytic reforming, alkylation, catalytic cracking, thermal cracking, coking or isomerization.
- 4A. A change to headings 2711 through 2715 from any heading outside that group, except from heading 2710.”

4. TCRs 8 through 10, inclusive, for chapter 29 are deleted and the following new TCRs are inserted in lieu thereof:

- “8. A change to subheadings 2905.11 through 2905.49 from any other subheading, including another subheading within that group.”

5. TCR 2 for chapter 71 is deleted and the following new TCR is inserted in lieu thereof:

- “2. A change to headings 7113 through 7118 from any heading outside that group.”