

## **CHAPTER 8**

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### **ACRONYMS AND GLOSSARY**

**ACRONYMS AND ABBREVIATIONS  
GLOSSARY**

CHAPTER 8.0

ACRONYMS AND ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AB1807	California Toxic Air Contaminants Program (Tanner Bill)
AB2728	Revised Tanner Bill
AB2588	Air Toxic "Hot Spots" Information and Assessment Act
AB2595	California Clean Air Act
ACE2588	Assessment of Chemical Exposure for AB2588
API	American Petroleum Institute
ADT	Average Daily Traffic
AEL	Acute Exposure Limit
AHM	Acutely Hazardous Material
ALKY	Alkylate
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ATIR	Air Toxics Inventory Report
AVR	Average Vehicle Ridership
BACT	Best Available Control Technology
Basin	South Coast Air Basin
BLEVE	Boiling Liquid Expanding Vapor Explosion
BTU	British Thermal Units
BTU/hr	British Thermal Units per hour
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CalARP	California Accidental Release Prevention Program
Caltrans	California Department of Transportation
CalOSHA	California Occupational Safety and Health Administration
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CARBOB	Gasoline compliant with CARB Phase 3 requirements, minus oxygenate
CCR	California Code of Regulations
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMP	Congestion Management Plan
CNEL	community noise equivalent level
CNS	Central nervous system
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide

CPUC	California Public Utilities Commission
CUP	Conditional Use Permit
C4	Butane
dBA	A-weighted noise level measurement in decibels
DOT	Department of Transportation
DTSC	California Environmental Protection Agency, Department of Toxic Substances Control
DWR	California Department of Water Resources
D207	Asphalt residuals
EHS	Extremely Hazardous Substance
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPCRA	USEPA's Emergency Planning and Community Right-to-Know
ERPG	Emergency Response Planning Guideline
°F	Degrees Fahrenheit
FCCU	Fluid Catalytic Cracking Unit
FEMA	Federal Emergency Management Agency
Ft-bgs	feet below ground surface
FHWA	Federal Highway Administration
FIP	Federal Implementation Plan
G	acceleration of gravity
H <sub>2</sub>	Hydrogen
HAZOP	hazards and operation process
HDS	Hydrodesulfurization unit
HMBP	Hazardous Materials Business Plan
HRA	Health Risk Assessment
HN	Heavy naphtha
ICU	Intersection Capacity Utilization
ID #	Identification number
IMO	International Maritime Organization
ISCST3	Industrial Source Complex Model Short Term Version 3
JP8	Jet fuel
°K	degrees Kelvin
K <sub>h</sub>	Soil-water distribution coefficient
K <sub>oc</sub>	Henry's Law constant (water-soil distribution coefficient)
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LADPW	Los Angeles Department of Public Works
LAER	lowest achievable emission reduction
LEL	lower explosive limit
lbs	pounds
lbs/hr	pounds per hour
L <sub>dn</sub>	day-night average sound level
L <sub>eq</sub>	energy equivalent sound level
L <sub>max</sub>	Maximum sound level

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Lmin	Minimum sound level
LOS	Level of Service
LPG	liquefied petroleum gas
Lpk	Peak sound level
LD DSL	Low sulfur diesel fuel
M-2	zone code associated with Heavy Manufacturing
MACT	Maximum Achieved Control Technologies
m/s	meters per second
MATES	Multiple Air Toxic Exposure Study
MEIR	maximum exposed individual resident
MEIW	maximum exposed individual worker
Mole	Standard method in chemistry for communicating how much of a substance is present using the same number of chemical units as there are atoms in exactly 12 grams of carbon-12 (i.e., $6.023 \times 10^{23}$ ).
MT	Empty
MTBE	methyl tertiary butyl ether
mw	megawatts
MWD	Metropolitan Water District of Southern California
N <sub>2</sub>	nitrogen
NAAQS	National Ambient Air Quality Standards
nanograms/m <sup>3</sup>	nanograms per cubic meter
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Agency
NIOSH	National Institute of Occupational Safety and Health
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NS	No significant impacts
NSPS	New Source Performance Standards
NSR	New Source Review
OSHA	Occupational Safety and Health Administration
PAH's	Polynuclear Aromatic Hydrocarbons
PCE	passenger car equivalents
pH	potential hydrogen ion concentration
PM10	particulate matter less than 10 microns equivalent aerodynamic diameter
ppbv	parts per billion by volume
ppm	parts per million
ppmv	parts per million by volume
PRD	pressure relief devices
PRC	Public Resources Code
PS	Potentially Significant
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch (gauge)

PSM	Process Safety Management Program
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RECLAIM	Regional Clean Air Incentives Market
REL	Reference exposure level
RFG	reformulated fuels gasoline
RMP	Risk Management Program
RMPP	Risk Management and Prevention Program
RVP	Reid Vapor Pressure
RWQCB	Regional Water Quality Control Board, Los Angeles Region
S	Significant impacts even after mitigation
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SCR	Selective Catalytic Reduction
SCS	Soil Conservation Service
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxide
SPCC	Spill Prevention, Control and Countermeasure
SRU	Sulfur Recovery Unit
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
T-BACT	Toxics Best Available Control Technology
TACs	toxic air contaminants
TDM	transportation demand management
TDS	total dissolved solids
TIMP	Transportation Improvement and Mitigation Program
TPH	total petroleum hydrocarbons
UNL	Unleaded gas
UNT DSL	Untreated diesel
USDOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USC	United States Code
USDA	United States Department of Agriculture
USGS	United States Coast Guard
ug/l	micrograms per liter
ug/m <sup>3</sup>	micrograms per cubic meter
UVCE	Unconfined Vapor Cloud Explosion
V/C	volume to capacity ratio
VGO	Vacuum gas oil
VOC	volatile organic compounds
volatiles	purgeable organics
WRD	Water Replenishment District



## GLOSSARY

<b>TERM</b>	<b>DEFINITION</b>
Alkylation	The reaction of low-molecular-weight olefins with an isoparaffin to produce a saturated compound of high octane number.
Alkylate	The product of an alkylation process.
Anhydrous	Free from water.
Aqueous	Formed from water, having a water base.
Aromatics	Hydrocarbons which contain one or more benzene rings.
Barrel	42 gallons.
Blending	One of the final operations in refining, in which two or more different components are mixed together to obtain the desired range of properties in the finished product.
Catalyst	A substance that promotes a chemical reaction to take place but which is not itself chemically changed.
Cracking	The process of breaking down higher molecular weight hydrocarbons to components with smaller molecular weights by the application of heat; cracking in the presence of a suitable catalyst produces an improvement in product yield and quality over simple thermal cracking.
Distillation	The process of heating a liquid to its boiling point and condensing and collecting the vapor.
Flares	Emergency equipment used to incinerate refinery gases during upset, startup, or shutdown conditions.
Heat exchanger	Process equipment used to transfer heat from one medium to another.
Heater	Process equipment used to raise the temperature of refinery streams processing.
Hydrocarbon	Organic compound containing hydrogen and carbon, commonly occurring in petroleum, natural gas, and coal.

Hydrotreater	A machine that treats hydrocarbons.												
Hydrotreating	A process to catalytically stabilize petroleum products of feedstocks by reacting them with hydrogen.												
Isomerization	The rearrangement of straight-chain hydrocarbon molecules to form branch chain products; normal butane may be isomerized to provide a portion of the isobutane feed needed for the alkylation process.												
Liquefied Petroleum Gas (LPG)	Liquefied light end gases often used for home heating and cooking; this gas is usually 95 percent propane, the remainder being split between ethane and butane.												
Mole	One mole of a chemical species (atoms, molecules or ions) is the quantity that contains Avogadro's number of particles. Avogadro's number is the number of atoms contained in exactly 12 grams of <sup>12</sup> C.												
MTBE	Methyl tertiary butyl ether; used in gasoline blending to meet the reformulated gasoline specifications for oxygen content; MTBE also raises the octane number of gasoline.												
Naphtha	A crude distillation unit cut in the range of C <sub>7</sub> -420°; naphthas are subdivided – according to the actual crude distillation cuts - into light, intermediate, heavy, and very heavy virgin naphthas; a typical crude distillation operation would be: <table border="0" style="margin-left: 40px;"> <tr> <td>C<sub>7</sub>-160°</td> <td>-</td> <td>light naphtha</td> </tr> <tr> <td>160-280°</td> <td>-</td> <td>intermediate naphtha</td> </tr> <tr> <td>280-330°</td> <td>-</td> <td>heavy naphtha</td> </tr> <tr> <td>330-420°</td> <td>-</td> <td>very heavy naphtha</td> </tr> </table>	C <sub>7</sub> -160°	-	light naphtha	160-280°	-	intermediate naphtha	280-330°	-	heavy naphtha	330-420°	-	very heavy naphtha
C <sub>7</sub> -160°	-	light naphtha											
160-280°	-	intermediate naphtha											
280-330°	-	heavy naphtha											
330-420°	-	very heavy naphtha											
Octane	Measurement of the burning quality of the gasoline; reflects the Suitability of gasoline to perform in internal combustion engines smoothly without letting the engine knock or ping.												
Olefins	Hydrocarbons that contain at least two carbons joined by double bonds; olefins do not naturally occur in crude oils but are formed during the processing.												
Palentological	Prehistoric life.												
Peak Hour	This typically refers to the hour during the AM peak period (typically 7 AM to 9 AM) or the PM peak period (typically												



4 PM to 6 PM) in which the greatest number of vehicles trips are generated by a given land use or are traveling on a given roadway.

Reactor	Vessels in which desired reactions take place.
Refinery gas (fuel gas)	Gas produced from refinery operations used primarily for combustion in refinery heaters and boilers.
Reformate	One of the products from a reformer; a reformed naphtha; the naphtha is then upgraded in octane by means of catalytic or thermal reforming process.
Reformulated gasoline	New gasoline required under the federal Clean Air Act and California Air Resources Board to reduce emissions.
Reid Vapor Pressure	The vapor pressure of a product determined in a volume of air four times greater than the liquid volume at 100°F; Reid vapor pressure (RVP) is an indication of the vapor-lock tendency of a motor gasoline, as well as explosion and evaporation hazards.
Seiches	A vibration of the surface of a lake or landlocked sea that varies in period from a few minutes to several hours and which many change in intensity.
Stripper or Splitter	Refinery equipment used to separate two components in a feed stream; examples include sour water strippers and naphtha splitters.