

- (3) Wider range of climatic conditions - especially with respect to cold

II. Hazards to life and health in handling gasoline

1. Fire and explosion

- (1) Always so great that avoidance of this hazard has led to highly standardized methods of handling in peacetime to such an extent as largely to eliminate other health hazards
- (2) Increased greatly by conditions of warfare
 - (a) By inexperienced and careless handling, and by emergency handling with haste and improvisations and vicissitudes of battle - supply at all costs as well as destruction in retreat
 - (b) By underground installations, and in structures closed up or surrounded by walls to prevent detection and to ward off worst effects of attack - bomb proof dumps
camouflaged plants, underground plants
 - (c) Temperature effects - heat-volatility
blast and black-out precautions
cold-static
Plants built in against severe cold.

2. Intoxication from exposure to vapors

- (1) Origin of intoxication - taken too lightly
 - (a) Straight chain hydrocarbons versus aromatics
 - (b) Unknown toxicologic properties of complicated compounds produced by modern cracking and polymerization
 - (c) Changes toxicity due to reforming with increased concentrations of segregated base stocks of special composition - alkylates-aromatics
 - (d) New additives - present and future
- (2) Limits of safe exposure
 - (a) Dependent upon length of exposure
 - (b) Dependent upon composition of vapors
 - (c) Results of current experience
- (3) Acute and chronic intoxication
- (4) Sequelae

3. Skin contact with motor fuels

- (1) Possibility of absorption of toxic materials through skin
- (2) Dermatitis

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