

**Scenariul 6. Avariarea unei conducte de metanol care alimenteaza instalatia de fabricare formaldehida de 60.000 to/an.**

***a. Conditii de raspandire defavorabile***

Simulare ALOHA

CHEMICAL DATA:

Chemical Name: METHANOL

CAS Number: 67-56-1

Molecular Weight: 32.04 g/mol

AEGL-1 (60 min): 530 ppm    AEGL-2 (60 min): 2100 ppm    AEGL-3 (60 min): 7200 ppm

IDLH: 6000 ppm    LEL: 71800 ppm    UEL: 365000 ppm

Ambient Boiling Point: 63.7° C

Vapor Pressure at Ambient Temperature: 0.13 atm

Ambient Saturation Concentration: 130,928 ppm or 13.1%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1 meters/second from N at 3 meters

Ground Roughness: urban or forest

Cloud Cover: 10 tenths

Air Temperature: 20° C

Stability Class: D (user override)

No Inversion Height

Relative Humidity: 80%

SOURCE STRENGTH:

Evaporating Puddle (Note: chemical is flammable)

Puddle Area: 61 square meters

Puddle Mass: 243 kilograms

Ground Type: Concrete

Ground Temperature: 20° C

Initial Puddle Temperature: Ground temperature

Release Duration: ALOHA limited the duration to 1 hour

Max Average Sustained Release Rate: 1.49 kilograms/min (averaged over a minute or more)

Total Amount Released: 77.1 kilograms

THREAT ZONE: (GAUSSIAN SELECTED)<sup>1)</sup>

Model Run: Gaussian<sup>1)</sup>

Red : less than 10 meters(10.9 yards) --- (128000 ppm)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: less than 10 meters(10.9 yards) --- (6000 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 60 meters --- (200 ppm = ERPG-1)



- Zona cu leziuni ireversibile
- Zona cu leziuni reversibile(zona de atentie)

## ***b. Conditii de raspandire medii***

Simulare ALOHA

### CHEMICAL DATA:

Chemical Name: METHANOL

CAS Number: 67-56-1

Molecular Weight: 32.04 g/mol

AEGL-1 (60 min): 530 ppm    AEGL-2 (60 min): 2100 ppm    AEGL-3 (60 min): 7200 ppm

IDLH: 6000 ppm    LEL: 71800 ppm    UEL: 365000 ppm

Ambient Boiling Point: 63.7° C

Vapor Pressure at Ambient Temperature: 0.13 atm

Ambient Saturation Concentration: 130,928 ppm or 13.1%

### ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 3 meters/second from N at 3 meters

Ground Roughness: urban or forest

Cloud Cover: 10 tenths

Air Temperature: 20° C

Stability Class: D

No Inversion Height

Relative Humidity: 80%

### SOURCE STRENGTH:

Evaporating Puddle (Note: chemical is flammable)

Puddle Area: 61 square meters

Puddle Mass: 243 kilograms

Ground Type: Concrete

Ground Temperature: 20° C

Initial Puddle Temperature: Ground temperature

Release Duration: ALOHA limited the duration to 1 hour

Max Average Sustained Release Rate: 3.04 kilograms/min averaged over a minute or more)

Total Amount Released: 147 kilograms

### THREAT ZONE: (GAUSSIAN SELECTED)<sup>1)</sup>

Model Run: Gaussian

Red : less than 10 meters(10.9 yards) --- (128000 ppm)

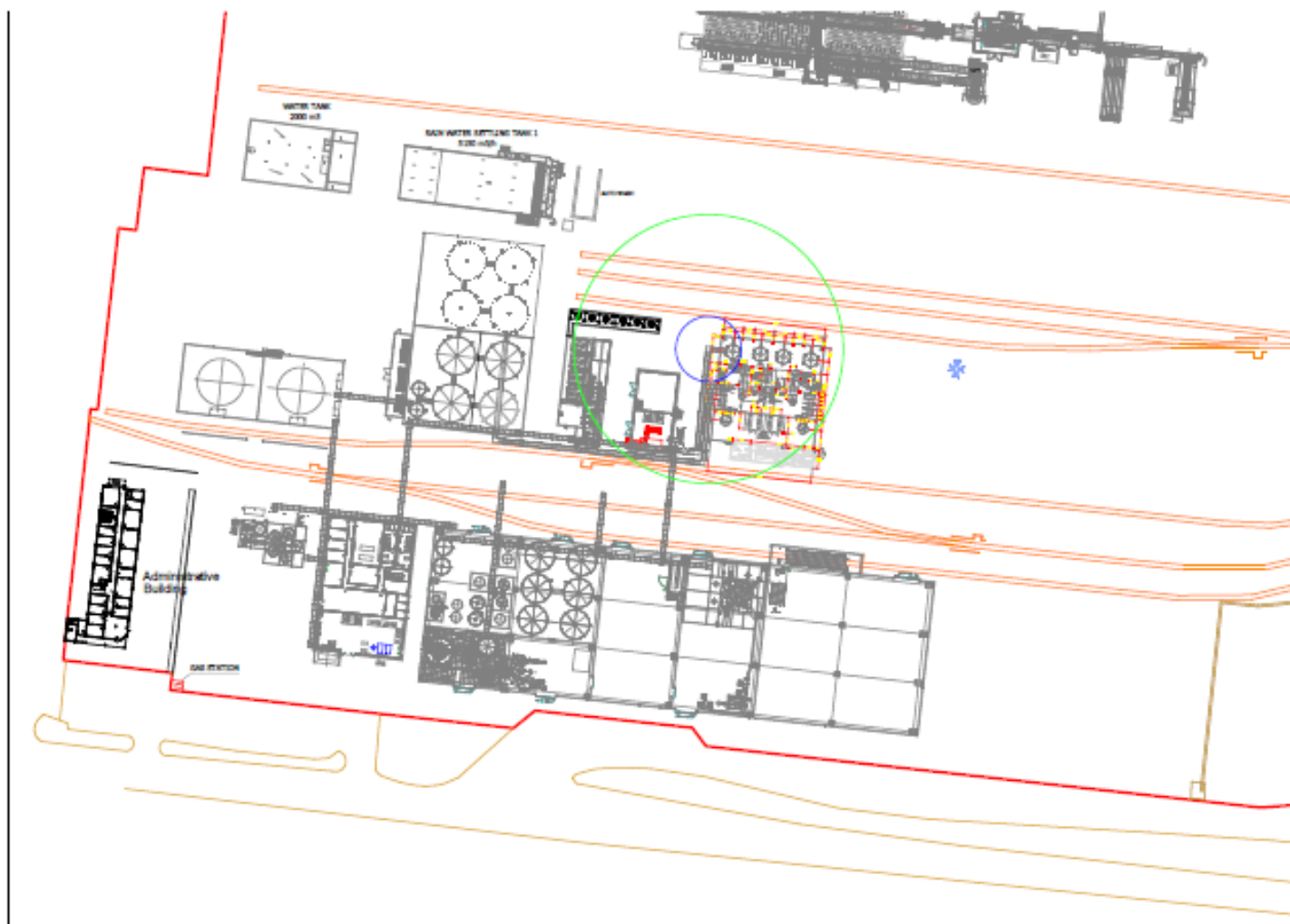
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: less than 10 meters(10.9 yards) --- (6000 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 41 meters --- (200 ppm = ERPG-1)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.



- Zona cu leziuni ireversibile
- Zona cu leziuni reversibile(zona de atentie)