TOP EVENT 1

Methanol spill out

Outside containment basins

Base Case

Data

Weather: **Category 2/F**

Speed: **2,00 m/s** **Stability:** **F**

TOP EVENT 1\Methanol spill out\Outside containment basins

Dispersion Commentary

-------- Dispersion Results
Quasi-Instantaneous transitions enabled (duration adjustment not applied)
Start of new release segment
Expansion zone is 0.001942 m
Dispersion starts as dense plume/cloud
Release segment of duration 58.78 s
Rainout: 1 of cloud rained out at distance 0.05194 m and time since release of 0.2452 s
with cloud located at 0.05194 m (no bund is present)
Liquid pool does not vaporize significantly
Cloud center has reached the UFL concentration 0.36 fraction at distance 0.387 m and time 0.8884 s
Cloud center has reached the LFL concentration 0.073 fraction at distance 0.8483 m and time 1.643 s
Cloud center has reached the LFL fractional concentration 0.0365 fraction at distance 1.177 m and time 2.174 s
Dispersion modeled as passive plume/cloud at distance 3.252 m and time 5.53 s
Cloud center has reached the user-specified distance of interest 10 m at time 16.44 s and concentration 0.000989 fraction
Cloud center has reached the user-specified distance of interest 25 m at time 40.69 s and concentration 0.00039 fraction
Cloud center has reached the user-specified distance of interest 50 m at time 81.11 s and concentration 0.0001587 fraction
Cloud center has reached the user-specified concentration 1E-5 fraction at distance 264.1 m and time 335.4 s

Info

-------- Late Explosion Category 2/F Results
No late explosions are predicted

Information

-------- Discharge Category 2/F Results
Running model Time Varying ...
-------- Dispersion Category 2/F Results
Dispersion will end at either a concentration of 10 ppm or a distance of 50 m
Cloud calculations will use concentration 10 ppm and Averaging Time 18.75 s (Flammable)
UDM results file read. 32 records, 1 segment headers, 30 dispersion results
Dispersion results post-processing completed OK
-------- Jet Fire Category 2/F Results
JetFire preprocessor returned a mass rate of 0.000201349 kg/s
SHELL JetFire calculation selected

Information

-------- Linked Radiation Category 2/F Results
Radiation ellipses for jet fire moved to release point because jet impinges
-------- Early Pool Fire Category 2/F Results
Defaults assumed for combustion in new pool fire model
-------- Late Pool Fire Category 2/F Results
Defaults assumed for combustion in new pool fire model

Warnings

-------- Early Pool Fire Category 2/F Results
POLF 1002: Calculated radiative fraction 2.118 too large; reduced to be less than combustion efficiency
-------- Late Pool Fire Category 2/F Results
POLF 1002: Calculated radiative fraction 2.116 too large; reduced to be less than combustion efficiency

Weather: **Category 5/D**
Speed: **5,00 m/s** **Stability:** **D**

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Dispersion Commentary

-------- Dispersion Results
Quasi-Instantaneous transitions enabled (duration adjustment not applied)
Start of new release segment
Expansion zone is 0.001942 m
Dispersion starts as dense plume/cloud
Release segment of duration 58.78 s
Rainout: 1 of cloud rained out at distance 0.002442 m and time since release of 0.002452 s with cloud located at 0.002442 m (no bund is present)
Liquid pool does not vaporize significantly
Cloud center has reached the UFL concentration 0.36 fraction at distance 0.2824 m and time 0.1694 s
Cloud center has reached the LFL concentration 0.073 fraction at distance 0.9602 m and time 0.3973 s
Cloud center has reached the LFL fractional concentration 0.0365 fraction at distance 1.338 m and time 0.5162 s
Dispersion modeled as passive plume/cloud at distance 4.227 m and time 1.418 s
Cloud center has reached the user-specified distance of interest 10 m at time 3.218 s and concentration 0.000472 fraction
Cloud center has reached the user-specified distance of interest 25 m at time 7.897 s and concentration 5.615E-5 fraction
Cloud center has reached the user-specified distance of interest 50 m at time 15.38 s and concentration 1.228E-5 fraction
Cloud center has reached the user-specified concentration 1E-5 fraction at distance 54.18 m and time 16.56 s

Info

-------- Late Explosion Category 5/D Results
No late explosions are predicted

Information

-------- Discharge Category 5/D Results
Running model Time Varying ...
-------- Dispersion Category 5/D Results
Dispersion will end at either a concentration of 10 ppm or a distance of 50 m
Cloud calculations will use concentration 10 ppm and Averaging Time 18.75 s (Flammable)
UDM results file read. 26 records, 1 segment headers, 24 dispersion results
Dispersion results post-processing completed OK
-------- Jet Fire Category 5/D Results
JetFire preprocessor returned a mass rate of 6.14644e-005 kg/s
SHELL JetFire calculation selected
-------- Linked Radiation Category 5/D Results
Radiation ellipses for jet fire moved to release point because jet impinges
-------- Early Pool Fire Category 5/D Results
Defaults assumed for combustion in new pool fire model
-------- Late Pool Fire Category 5/D Results
Defaults assumed for combustion in new pool fire model

Warnings

-------- Early Pool Fire Category 5/D Results
POLF 1002: Calculated radiative fraction 2.118 too large; reduced to be less than combustion efficiency
-------- Late Pool Fire Category 5/D Results
POLF 1002: Calculated radiative fraction 2.116 too large; reduced to be less than combustion efficiency