



Time: April 3, 2012 1058 hours ST (user specified)

Chemical Name: METHANE

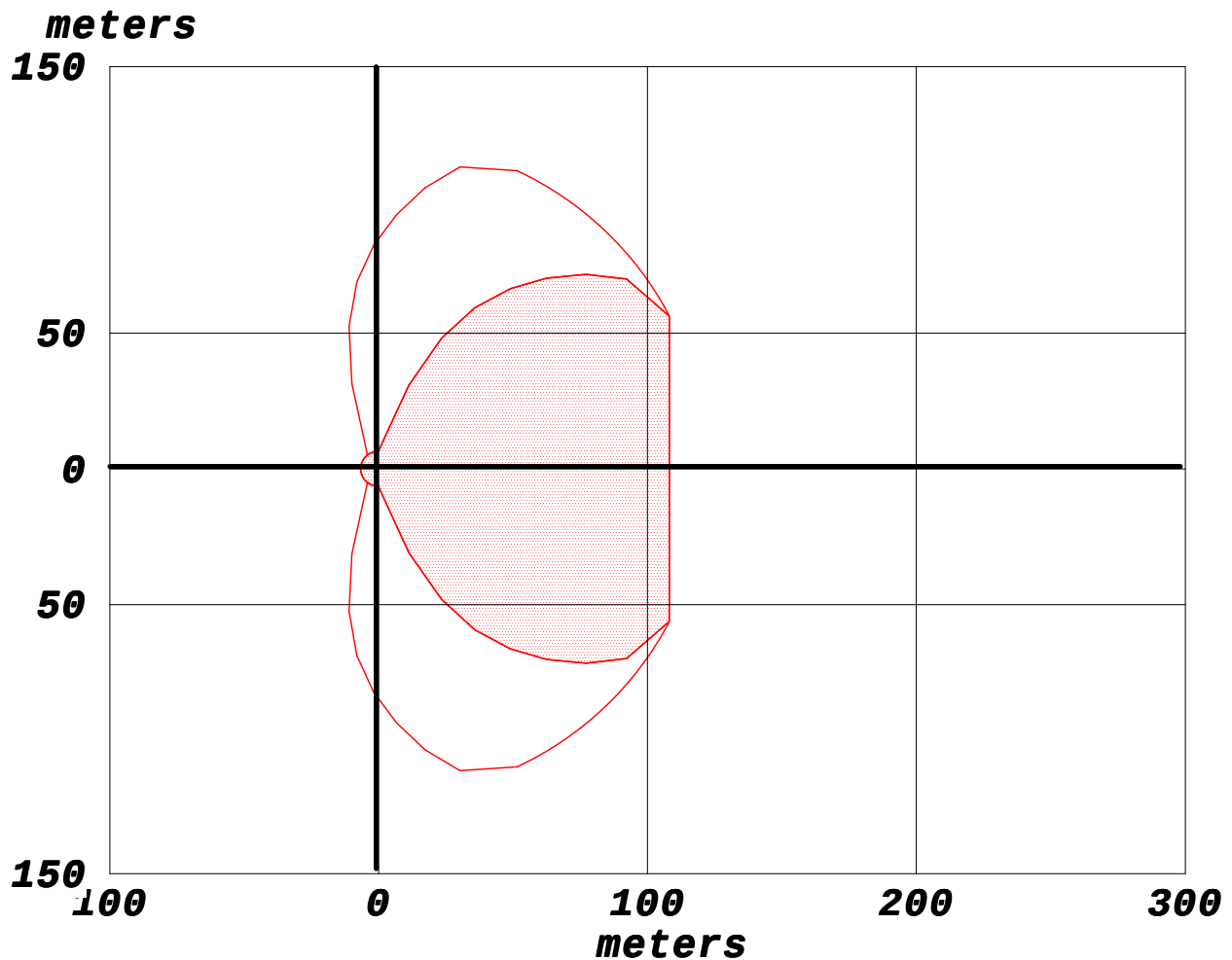
Wind: 2.8 meters/second from 315° true at 10 meters

THREAT ZONE:

Threat Modeled: Flammable Area of Vapor Cloud

Model Run: Heavy Gas

Red : 109 meters --- (30000 ppm = 60% LEL = Flame Pockets)



 **greater than 30000 ppm (60% LEL = Flame Pockets)**
 **Confidence Lines**

**SITE DATA:****Location: MORA, PORTUGAL****Building Air Exchanges Per Hour: 0.30 (unsheltered double storied)****Time: April 3, 2012 1058 hours ST (user specified)****CHEMICAL DATA:****Chemical Name: METHANE****Molecular Weight: 16.04 g/mol****PAC-1: 2900 ppm PAC-2: 2900 ppm****PAC-3: 17000 ppm****LEL: 50000 ppm UEL: 150000 ppm****Ambient Boiling Point: -161.6° C****Vapor Pressure at Ambient Temperature: greater than 1 atm****Ambient Saturation Concentration: 1,000,000 ppm or 100.0%****ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)****Wind: 2.8 meters/second from 315° true at 10 meters****Ground Roughness: open country****Cloud Cover: 5 tenths****Air Temperature: 22° C****Stability Class: B****No Inversion Height****Relative Humidity: 25%****SOURCE STRENGTH:****Leak from short pipe or valve in horizontal cylindrical tank****Flammable chemical escaping from tank (not burning)****Tank Diameter: 2 meters****Tank Length: 9.55 meters****Tank Volume: 30 cubic meters****Tank contains liquid****Internal Temperature: -160° C****Chemical Mass in Tank: 12,609 kilograms****Tank is 100% full****Circular Opening Diameter: 10 centimeters****Opening is 0 meters from tank bottom****Release Duration: 25 minutes****Max Average Sustained Release Rate: 634 kilograms/min****(averaged over a minute or more)****Total Amount Released: 12,609 kilograms****Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).****THREAT ZONE:****Threat Modeled: Flammable Area of Vapor Cloud****Model Run: Heavy Gas****Red : 109 meters --- (30000 ppm = 60% LEL = Flame Pockets)**