Annex 5D

# Results of Consequence Analysis

*Table 5D.1 Results of Consequence Analysis for Natural Gas Facilities*

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| FG_01 | Manifold extending from Yacheng fuel gas manifold to blending station | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 389 | 437 | 461 | 432 |
| FG_02 | Manifold extending from Dachan fuel gas manifold to blending station | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | 100 | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 389 | 437 | 461 | 432 |
| FG_03 | Manifold from blending station for 1st CCGT Unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 389 | 437 | 461 | 432 |
| FG_04 | Piping from manifold to 1st CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW m$^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW m$^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW m$^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_05 | 1st CCGT unit gas filter separator | Vapour | 10 | Jet fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW m$^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW m$^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW m$^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW m$^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW m$^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW m$^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW m$^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW m$^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW m$^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW m$^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW m$^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW m$^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW m$^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW m$^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW m$^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW m$^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_06 | 1st CCGT unit fuel gas module | Vapour | 10 | Jet fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW m$^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_07 | Manifold for 2nd CCGT | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 389 | 437 | 461 | 432 |
| FG_08 | Piping from manifold to 2nd CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_09 | 2nd CCGT unit gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_10 | 2nd CCGT unit fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| GRS_01 | Above ground piping from shore end to pig receiver of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_02 | Piping from receiver to slug catcher of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_03 | Piping from slug catcher to inlet gas filter separators of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_04 | Piping from inlet gas filter separator to gas heater of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_05 | Piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_06 | Piping from pressure reduction station to outlet gas filter separator of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_07 | Piping from outlet gas filter separator to manifold, including sales gas meter unit of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 0 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 10 | 10 | 10 | 10 |
| | | | | Flash fire | LFL | 6 | 7 | 6 | 7 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 21 | 21 | 23 | 21 |
| | | | | | 19.5 kW $m^{-2}$ | 23 | 23 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 26 | 26 | 27 | 26 |
| | | | | Flash fire | LFL | 16 | 17 | 16 | 17 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 38 | 39 | 44 | 38 |
| | | | | | 28.3 kW $m^{-2}$ | 40 | 41 | 45 | 40 |
| | | | | | 19.5 kW $m^{-2}$ | 44 | 45 | 48 | 44 |
| | | | | | 9.8 kW $m^{-2}$ | 51 | 51 | 53 | 50 |
| | | | | Flash fire | LFL | 36 | 37 | 38 | 37 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 69 | 69 | 78 | 68 |
| | | | | | 28.3 kW $m^{-2}$ | 72 | 73 | 81 | 71 |
| | | | | | 19.5 kW $m^{-2}$ | 80 | 80 | 86 | 79 |
| | | | | | 9.8 kW $m^{-2}$ | 94 | 94 | 97 | 93 |
| | | | | Flash fire | LFL | 78 | 81 | 85 | 81 |
| | | | Full bore | Fireball | Fireball radius | 83 | 83 | 83 | 83 |
| | | | | | 35.5 kW $m^{-2}$ | 204 | 204 | 204 | 204 |
| | | | | | 28.3 kW $m^{-2}$ | 229 | 229 | 229 | 229 |
| | | | | | 19.5 kW $m^{-2}$ | 277 | 277 | 277 | 277 |
| | | | | | 9.8 kW $m^{-2}$ | 387 | 387 | 387 | 387 |
| | | | | Flash fire | LFL | 426 | 477 | 501 | 472 |
| GRS_08 | Pig receiver of Yacheng GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 17 | 17 | 18 | 17 |
| | | | | | 28.3 kW $m^{-2}$ | 18 | 18 | 19 | 17 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 20 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 22 | 22 | 22 |
| | | | | Flash fire | LFL | 13 | 14 | 13 | 14 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 40 | 45 | 39 |
| | | | | | 28.3 kW $m^{-2}$ | 42 | 42 | 47 | 41 |
| | | | | | 19.5 kW $m^{-2}$ | 46 | 46 | 50 | 45 |
| | | | | | 9.8 kW $m^{-2}$ | 53 | 53 | 55 | 53 |
| | | | | Flash fire | LFL | 39 | 40 | 40 | 40 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 71 | 71 | 81 | 70 |
| | | | | | 28.3 kW $m^{-2}$ | 75 | 76 | 84 | 73 |
| | | | | | 19.5 kW $m^{-2}$ | 82 | 83 | 89 | 82 |
| | | | | | 9.8 kW $m^{-2}$ | 97 | 98 | 101 | 97 |
| | | | | Flash fire | LFL | 85 | 87 | 92 | 86 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 126 | 126 | 139 | 125 |
| | | | | | 28.3 kW $m^{-2}$ | 131 | 132 | 145 | 131 |
| | | | | | 19.5 kW $m^{-2}$ | 146 | 147 | 156 | 144 |
| | | | | | 9.8 kW $m^{-2}$ | 177 | 178 | 180 | 176 |
| | | | | Flash fire | LFL | 179 | 184 | 195 | 183 |
| | | | Full bore | Fireball | Fireball radius | 135 | 135 | 135 | 135 |
| | | | | | 35.5 kW $m^{-2}$ | 320 | 320 | 320 | 320 |
| | | | | | 28.3 kW $m^{-2}$ | 361 | 361 | 361 | 361 |
| | | | | | 19.5 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | | 9.8 kW $m^{-2}$ | 605 | 605 | 605 | 605 |
| | | | | Flash fire | LFL | 767 | 829 | 875 | 835 |
| GRS_11 | Above ground piping from shore end to pig receiver of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | 100 | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 95 | 95 | 95 | 95 |
| | | | | | 35.5 kW $m^{-2}$ | 231 | 231 | 231 | 231 |
| | | | | | 28.3 kW $m^{-2}$ | 260 | 260 | 260 | 260 |
| | | | | | 19.5 kW $m^{-2}$ | 315 | 315 | 315 | 315 |
| | | | | | 9.8 kW $m^{-2}$ | 439 | 439 | 439 | 439 |
| | | | | Flash fire | LFL | 309 | 349 | 366 | 344 |
| GRS_12 | Piping from receiver to gas filter of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball Radius | 94 | 94 | 94 | 94 |
| | | | | | 35.5 kW $m^{-2}$ | 229 | 229 | 229 | 229 |
| | | | | | 28.3 kW $m^{-2}$ | 259 | 259 | 259 | 259 |
| | | | | | 19.5 kW $m^{-2}$ | 312 | 312 | 312 | 312 |
| | | | | | 9.8 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | Flash fire | LFL | 303 | 343 | 360 | 339 |
| GRS_13 | Filter & inlet/outlet piping of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball Radius | 65 | 65 | 65 | 65 |
| | | | | | 35.5 kW $m^{-2}$ | 163 | 163 | 163 | 163 |
| | | | | | 28.3 kW $m^{-2}$ | 182 | 182 | 182 | 182 |
| | | | | | 19.5 kW $m^{-2}$ | 219 | 219 | 219 | 219 |
| | | | | | 9.8 kW $m^{-2}$ | 308 | 308 | 308 | 308 |
| | | | | Flash fire | LFL | 335 | 368 | 389 | 364 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| GRS_14 | Piping from filter to metering station of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 94 | 94 | 94 | 94 |
| | | | | | 35.5 kW $m^{-2}$ | 229 | 229 | 229 | 229 |
| | | | | | 28.3 kW $m^{-2}$ | 259 | 259 | 259 | 259 |
| | | | | | 19.5 kW $m^{-2}$ | 312 | 312 | 312 | 312 |
| | | | | | 9.8 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | Flash fire | LFL | 303 | 343 | 360 | 339 |
| GRS_15 | Piping from metering station to heaters, including metering runs of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 94 | 94 | 94 | 94 |
| | | | | | 35.5 kW $m^{-2}$ | 229 | 229 | 229 | 229 |
| | | | | | 28.3 kW $m^{-2}$ | 259 | 259 | 259 | 259 |
| | | | | | 19.5 kW $m^{-2}$ | 312 | 312 | 312 | 312 |
| | | | | | 9.8 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | Flash fire | LFL | 303 | 343 | 360 | 339 |
| GRS_16 | Heater Piping of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 59 | 59 | 59 | 59 |
| | | | | | 35.5 kW $m^{-2}$ | 149 | 149 | 149 | 149 |
| | | | | | 28.3 kW $m^{-2}$ | 168 | 168 | 168 | 168 |
| | | | | | 19.5 kW $m^{-2}$ | 203 | 203 | 203 | 203 |
| | | | | | 9.8 kW $m^{-2}$ | 283 | 283 | 283 | 283 |
| | | | | Flash fire | LFL | 300 | 331 | 348 | 328 |
| GRS_17 | Piping from heater to Pressure Reduction Station, including Pressure Reduction Station of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW $m^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW $m^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW $m^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW $m^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW $m^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW $m^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW $m^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 94 | 94 | 94 | 94 |
| | | | | | 35.5 kW $m^{-2}$ | 229 | 229 | 229 | 229 |
| | | | | | 28.3 kW $m^{-2}$ | 259 | 259 | 259 | 259 |
| | | | | | 19.5 kW $m^{-2}$ | 312 | 312 | 312 | 312 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 435 | 435 | 435 | 435 |
| | | | | Flash fire | LFL | 303 | 343 | 360 | 339 |
| GRS_18 | Piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 230 | 257 | 270 | 252 |
| GRS_19 | Pig receiver of Dachan GRS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 11 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 12 | 12 | 12 | 12 |
| | | | | Flash fire | LFL | 8 | 8 | 7 | 8 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 24 | 25 | 27 | 24 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW m$^{-2}$ | 25 | 25 | 28 | 25 |
| | | | | | 19.5 kW m$^{-2}$ | 27 | 28 | 30 | 27 |
| | | | | | 9.8 kW m$^{-2}$ | 31 | 31 | 33 | 31 |
| | | | | Flash fire | LFL | 20 | 21 | 20 | 21 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 45 | 46 | 52 | 45 |
| | | | | | 28.3 kW m$^{-2}$ | 48 | 48 | 54 | 47 |
| | | | | | 19.5 kW m$^{-2}$ | 52 | 53 | 57 | 52 |
| | | | | | 9.8 kW m$^{-2}$ | 60 | 61 | 63 | 60 |
| | | | | Flash fire | LFL | 45 | 47 | 48 | 46 |
| | | | 100 | Jet fire | 35.5 kW m$^{-2}$ | 80 | 81 | 49 | 79 |
| | | | | | 28.3 kW m$^{-2}$ | 84 | 85 | 49 | 83 |
| | | | | | 19.5 kW m$^{-2}$ | 93 | 94 | 49 | 92 |
| | | | | | 9.8 kW m$^{-2}$ | 110 | 111 | 49 | 110 |
| | | | | Flash fire | LFL | 96 | 100 | 106 | 100 |
| | | | Full bore | Fireball | Fireball radius | 104 | 104 | 104 | 104 |
| | | | | | 35.5 kW m$^{-2}$ | 252 | 252 | 252 | 252 |
| | | | | | 28.3 kW m$^{-2}$ | 284 | 284 | 284 | 284 |
| | | | | | 19.5 kW m$^{-2}$ | 340 | 340 | 340 | 340 |
| | | | | | 9.8 kW m$^{-2}$ | 475 | 475 | 475 | 475 |
| | | | | Flash fire | LFL | 351 | 398 | 417 | 394 |
| FG_101 | Yacheng manifold | Vapour | 10 | Jet fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW m$^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW m$^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW m$^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW m$^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW m$^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW m$^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW m$^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW m$^{-2}$ | 50 | 50 | 52 | 49 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 81 | 81 | 81 | 81 |
| | | | | | 35.5 kW $m^{-2}$ | 201 | 201 | 201 | 201 |
| | | | | | 28.3 kW $m^{-2}$ | 226 | 226 | 226 | 226 |
| | | | | | 19.5 kW $m^{-2}$ | 272 | 272 | 272 | 272 |
| | | | | | 9.8 kW $m^{-2}$ | 381 | 381 | 381 | 381 |
| | | | | Flash fire | LFL | 389 | 437 | 461 | 432 |
| FG_102 | Dachan manifold | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Fireball | Fireball radius | 74 | 74 | 74 | 74 |
| | | | | | 35.5 kW $m^{-2}$ | 182 | 182 | 182 | 182 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW $m^{-2}$ | 205 | 205 | 205 | 205 |
| | | | | | 19.5 kW $m^{-2}$ | 248 | 248 | 248 | 248 |
| | | | | | 9.8 kW $m^{-2}$ | 346 | 346 | 346 | 346 |
| | | | | Flash fire | LFL | 347 | 392 | 412 | 388 |
| FG_103 | Piping from manifold to Unit 1 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_104 | Unit 1 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_105 | Unit 1 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_106 | Piping from manifold to Unit 2 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_107 | Unit 2 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_108 | Unit 2 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_109 | Piping from manifold to Unit 3 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW m$^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW m$^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW m$^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW m$^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW m$^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW m$^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW m$^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_110 | Unit 3 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW m$^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW m$^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW m$^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW m$^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW m$^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW m$^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW m$^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW m$^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW m$^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW m$^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW m$^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW m$^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW m$^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW m$^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW m$^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW m$^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| FG_111 | Unit 3 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_112 | Piping from manifold to Unit 4 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_113 | Unit 4 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_114 | Unit 4 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_115 | Piping from manifold to Unit 5 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_116 | Unit 5 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_117 | Unit 5 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_118 | Piping from manifold to Unit 6 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_119 | Unit 6 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_120 | Unit 6 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_121 | Piping from manifold to Unit 7 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_122 | Unit 7 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_123 | Unit 7 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 28.3 kW m$^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW m$^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW m$^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW m$^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW m$^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW m$^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW m$^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW m$^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW m$^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW m$^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW m$^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW m$^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW m$^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW m$^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_124 | Piping from manifold to Unit 8 | Vapour | 10 | Jet fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW m$^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW m$^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW m$^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW m$^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW m$^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW m$^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW m$^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW m$^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW m$^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_125 | Unit 8 gas filter separator | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_126 | Unit 8 fuel gas module | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 8 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 9 | 9 | 10 | 9 |
| | | | | Flash fire | LFL | 6 | 6 | 6 | 6 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 20 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 19.5 kW $m^{-2}$ | 22 | 22 | 24 | 22 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 25 | 26 | 25 |
| | | | | Flash fire | LFL | 16 | 16 | 15 | 16 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 37 | 15 | 43 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 39 | 15 | 44 | 39 |
| | | | | | 19.5 kW $m^{-2}$ | 43 | 44 | 47 | 43 |
| | | | | | 9.8 kW $m^{-2}$ | 50 | 50 | 52 | 49 |
| | | | | Flash fire | LFL | 35 | 36 | 37 | 36 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 67 | 68 | 77 | 67 |
| | | | | | 28.3 kW $m^{-2}$ | 70 | 72 | 80 | 70 |
| | | | | | 19.5 kW $m^{-2}$ | 78 | 79 | 85 | 77 |
| | | | | | 9.8 kW $m^{-2}$ | 92 | 93 | 96 | 92 |
| | | | | Flash fire | LFL | 75 | 79 | 82 | 78 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 119 | 120 | 132 | 118 |
| | | | | | 28.3 kW $m^{-2}$ | 124 | 125 | 138 | 124 |
| | | | | | 19.5 kW $m^{-2}$ | 138 | 140 | 148 | 137 |
| | | | | | 9.8 kW $m^{-2}$ | 167 | 168 | 171 | 167 |
| | | | | Flash fire | LFL | 143 | 157 | 165 | 156 |
| FG_127 | Interconnecting gas pipeline from BPPS to CPPS | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 8 | 0 | 0 | 8 |
| | | | | | 9.8 kW $m^{-2}$ | 10 | 10 | 10 | 10 |
| | | | | Flash fire | LFL | 6 | 7 | 6 | 7 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 20 | 21 | 22 | 20 |
| | | | | | 28.3 kW $m^{-2}$ | 21 | 21 | 23 | 21 |
| | | | | | 19.5 kW $m^{-2}$ | 23 | 23 | 25 | 23 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) 2.5B | 3.0D | 7.0D | 2.0F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 9.8 kW $m^{-2}$ | 26 | 26 | 27 | 26 |
| | | | | Flash fire | LFL | 16 | 17 | 16 | 17 |
| | | | 50 | Jet fire | 35.5 kW $m^{-2}$ | 39 | 39 | 44 | 38 |
| | | | | | 28.3 kW $m^{-2}$ | 40 | 41 | 45 | 40 |
| | | | | | 19.5 kW $m^{-2}$ | 44 | 45 | 48 | 44 |
| | | | | | 9.8 kW $m^{-2}$ | 51 | 51 | 53 | 51 |
| | | | | Flash fire | LFL | 36 | 37 | 38 | 37 |
| | | | 100 | Jet fire | 35.5 kW $m^{-2}$ | 69 | 69 | 78 | 68 |
| | | | | | 28.3 kW $m^{-2}$ | 72 | 73 | 81 | 71 |
| | | | | | 19.5 kW $m^{-2}$ | 80 | 81 | 87 | 79 |
| | | | | | 9.8 kW $m^{-2}$ | 94 | 95 | 98 | 94 |
| | | | | Flash fire | LFL | 77 | 81 | 84 | 80 |
| | | | Full bore | Jet fire | Fireball radius | 75 | 75 | 75 | 75 |
| | | | | | 35.5 kW $m^{-2}$ | 186 | 186 | 186 | 186 |
| | | | | | 28.3 kW $m^{-2}$ | 209 | 209 | 209 | 209 |
| | | | | | 19.5 kW $m^{-2}$ | 252 | 252 | 252 | 252 |
| | | | | | 9.8 kW $m^{-2}$ | 351 | 351 | 351 | 351 |
| | | | | Flash fire | LFL | 354 | 400 | 420 | 396 |

*Table 5D.2 Results of Consequence Analysis for Hydrogen Gas Facilities*

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| HY_01 | Additional hydrogen road trailer for 1st CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 15 | 16 | 21 | 14 |
| | | | | | 28.3 kW $m^{-2}$ | 17 | 17 | 22 | 16 |
| | | | | | 19.5 kW $m^{-2}$ | 18 | 18 | 23 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 21 | 22 | 24 | 21 |
| | | | | Flash fire | LFL | 19 | 20 | 23 | 18 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 34 | 35 | 44 | 33 |
| | | | | | 28.3 kW $m^{-2}$ | 36 | 36 | 44 | 35 |
| | | | | | 19.5 kW $m^{-2}$ | 39 | 41 | 46 | 38 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 49 | 47 |
| | | | | Flash fire | LFL | 32 | 33 | 39 | 30 |
| | | | Catastrophic Rupture | Fireball | Fireball radius | 18 | 18 | 18 | 18 |
| | | | | | 35.5 kW $m^{-2}$ | 37 | 37 | 37 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 45 | 45 | 45 | 45 |
| | | | | | 19.5 kW $m^{-2}$ | 58 | 58 | 58 | 58 |
| | | | | | 9.8 kW $m^{-2}$ | 87 | 87 | 87 | 87 |
| | | | | Flash fire | LFL | 23 | 24 | 33 | 22 |
| HY_02 | Hydrogen manifold for 1st CCGT | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_03 | Piping from hydrogen manifold to 1st CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_04 | Additional hydrogen road trailer for 2nd CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 15 | 16 | 21 | 14 |
| | | | | | 28.3 kW $m^{-2}$ | 17 | 17 | 22 | 16 |
| | | | | | 19.5 kW $m^{-2}$ | 18 | 18 | 23 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 21 | 22 | 24 | 21 |
| | | | | Flash fire | LFL | 19 | 20 | 23 | 18 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 34 | 35 | 44 | 33 |
| | | | | | 28.3 kW $m^{-2}$ | 36 | 36 | 44 | 35 |
| | | | | | 19.5 kW $m^{-2}$ | 39 | 41 | 46 | 38 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 49 | 47 |
| | | | | Flash fire | LFL | 32 | 33 | 39 | 30 |
| | | | Catastrophic Rupture | Fireball | Fireball radius | 18 | 18 | 18 | 18 |
| | | | | | 35.5 kW $m^{-2}$ | 37 | 37 | 37 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 45 | 45 | 45 | 45 |
| | | | | | 19.5 kW $m^{-2}$ | 58 | 58 | 58 | 58 |
| | | | | | 9.8 kW $m^{-2}$ | 87 | 87 | 87 | 87 |
| | | | | Flash fire | LFL | 23 | 24 | 33 | 22 |
| HY_05 | Hydrogen manifold for 2nd CCGT | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_06 | Piping from hydrogen manifold to 2nd CCGT unit | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_11 | Hydrogen road trailer for existing gas facilities | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 15 | 16 | 21 | 14 |
| | | | | | 28.3 kW $m^{-2}$ | 17 | 17 | 22 | 16 |
| | | | | | 19.5 kW $m^{-2}$ | 18 | 18 | 23 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 21 | 22 | 24 | 21 |
| | | | | Flash fire | LFL | 19 | 20 | 23 | 18 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 34 | 35 | 44 | 33 |
| | | | | | 28.3 kW $m^{-2}$ | 36 | 36 | 44 | 35 |
| | | | | | 19.5 kW $m^{-2}$ | 39 | 41 | 46 | 38 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 49 | 47 |
| | | | | Flash fire | LFL | 32 | 33 | 39 | 30 |
| | | | Catastrophic Rupture | Fireball | Fireball radius | 18 | 18 | 18 | 18 |
| | | | | | 35.5 kW $m^{-2}$ | 37 | 37 | 37 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 45 | 45 | 45 | 45 |
| | | | | | 19.5 kW $m^{-2}$ | 58 | 58 | 58 | 58 |
| | | | | | 9.8 kW $m^{-2}$ | 87 | 87 | 87 | 87 |
| | | | | Flash fire | LFL | 23 | 24 | 33 | 22 |
| HY_12 | Hydrogen trailer at hydrogen trailer bay | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 15 | 16 | 21 | 14 |
| | | | | | 28.3 kW $m^{-2}$ | 17 | 17 | 22 | 16 |
| | | | | | 19.5 kW $m^{-2}$ | 18 | 18 | 23 | 17 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 21 | 22 | 24 | 21 |
| | | | | Flash fire | LFL | 19 | 20 | 23 | 18 |
| | | | 25 | Jet fire | 35.5 kW $m^{-2}$ | 34 | 35 | 44 | 33 |
| | | | | | 28.3 kW $m^{-2}$ | 36 | 36 | 44 | 35 |
| | | | | | 19.5 kW $m^{-2}$ | 39 | 41 | 46 | 38 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 49 | 47 |
| | | | | Flash fire | LFL | 32 | 33 | 39 | 30 |
| | | | Catastrophic Rupture | Fireball | Fireball radius | 18 | 18 | 18 | 18 |
| | | | | | 35.5 kW $m^{-2}$ | 37 | 37 | 37 | 37 |
| | | | | | 28.3 kW $m^{-2}$ | 45 | 45 | 45 | 45 |
| | | | | | 19.5 kW $m^{-2}$ | 58 | 58 | 58 | 58 |
| | | | | | 9.8 kW $m^{-2}$ | 87 | 87 | 87 | 87 |
| | | | | Flash fire | LFL | 23 | 24 | 33 | 22 |
| HY_13 | Trailer to high pressure piping | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 15 | 16 | 21 | 14 |
| | | | | | 28.3 kW $m^{-2}$ | 17 | 17 | 22 | 16 |
| | | | | | 19.5 kW $m^{-2}$ | 18 | 18 | 23 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 21 | 22 | 24 | 21 |
| | | | | Flash fire | LFL | 19 | 20 | 23 | 18 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 25 | 26 | 33 | 24 |
| | | | | | 28.3 kW $m^{-2}$ | 26 | 27 | 34 | 26 |
| | | | | | 19.5 kW $m^{-2}$ | 29 | 30 | 35 | 27 |
| | | | | | 9.8 kW $m^{-2}$ | 34 | 35 | 37 | 34 |
| | | | | Flash fire | LFL | 26 | 27 | 32 | 24 |
| HY_14 | Trailer to low pressure piping | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_15 | Hydrogen manifold | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_16 | Piping from main supply to Unit 1 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_17 | Piping from main supply to Unit 2 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_18 | Piping from main supply to Unit 3 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_19 | Piping from main supply to Unit 4 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_20 | Piping from main supply to Unit 5 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| HY_21 | Piping from main supply to Unit 6 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_22 | Piping from main supply to Unit 7 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |
| HY_23 | Piping from main supply to Unit 8 | Vapour | 10 | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | Flash fire | LFL | 7 | 8 | 8 | 7 |
| | | | Full bore | Jet fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 9.8 kW $m^{-2}$ | 7 | 7 | 8 | 7 |
| | | | | Flash fire | LFL | 10 | 11 | 11 | 10 |

*Table 5D.3 Results of Consequence Analysis for Distillate Oil Facilities*

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| DO_01 | Distillate oil manifold for 1st CCGT | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |
| DO_02 | Piping from distillate oil manifold to 1st CCGT unit | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_03 | Distillate oil manifold for 2nd CCGT | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |
| DO_04 | Piping from distillate oil manifold to 2nd CCGT unit | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_11 | Distillate oil tank #1 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 3 | 3 | 4 | 3 |
| | | | | | 28.3 kW $m^{-2}$ | 4 | 4 | 5 | 4 |
| | | | | | 19.5 kW $m^{-2}$ | 5 | 5 | 5 | 5 |
| | | | | | 9.8 kW $m^{-2}$ | 6 | 6 | 6 | 6 |
| | | | | Flash fire | LFL | 1 | 1 | 2 | 1 |
| | | | Catastrophic Rupture | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 55 | 55 | 55 | 55 |
| | | | | | 9.8 kW $m^{-2}$ | 63 | 65 | 72 | 62 |
| | | | | Flash fire | LFL | 28 | 28 | 28 | 37 |
| DO_12 | Distillate oil tank #2 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 3 | 3 | 4 | 3 |
| | | | | | 28.3 kW $m^{-2}$ | 4 | 4 | 5 | 4 |
| | | | | | 19.5 kW $m^{-2}$ | 5 | 5 | 5 | 5 |
| | | | | | 9.8 kW $m^{-2}$ | 6 | 6 | 6 | 6 |
| | | | | Flash fire | LFL | 1 | 1 | 2 | 1 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 55 | 55 | 55 | 55 |
| | | | | | 9.8 kW $m^{-2}$ | 63 | 65 | 72 | 62 |
| | | | | Flash fire | LFL | 28 | 28 | 28 | 37 |
| DO_13 | Distillate oil tank #3 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 3 | 3 | 4 | 3 |
| | | | | | 28.3 kW $m^{-2}$ | 4 | 4 | 5 | 4 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 19.5 kW $m^{-2}$ | 5 | 5 | 5 | 5 |
| | | | | | 9.8 kW $m^{-2}$ | 6 | 6 | 6 | 6 |
| | | | | Flash fire | LFL | 1 | 1 | 2 | 1 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 55 | 55 | 55 | 55 |
| | | | | | 9.8 kW $m^{-2}$ | 63 | 65 | 72 | 62 |
| | | | | Flash fire | LFL | 28 | 28 | 28 | 37 |
| DO_14 | Distillate oil pumping house | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |
| DO_15 | Distillate oil manifold section 1 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 14 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 16 | 16 | 17 | 15 |
| | | | | Flash fire | LFL | 7 | 7 | 8 | 6 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 10 | 10 | 10 | 10 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 12 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 27 | 21 |
| | | | | Flash fire | LFL | 9 | 9 | 9 | 8 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 19 | 19 | 19 | 19 |
| | | | | | 9.8 kW $m^{-2}$ | 25 | 26 | 30 | 25 |
| | | | | Flash fire | LFL | 10 | 10 | 11 | 10 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 36 | 36 | 36 | 36 |
| | | | | | 9.8 kW $m^{-2}$ | 43 | 44 | 49 | 41 |
| | | | | Flash fire | LFL | 13 | 13 | 13 | 13 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 153 | 153 | 153 | 153 |
| | | | | | 9.8 kW $m^{-2}$ | 162 | 164 | 177 | 159 |
| | | | | Flash fire | LFL | 11 | 11 | 11 | 11 |
| DO_16 | Distillate oil manifold section 2 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |
| DO_17 | Distillate oil manifold section 3 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |
| DO_18 | Piping from distillate oil manifold to Unit 1 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW m$^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW m$^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_19 | Piping from distillate oil manifold to Unit 2 | Liquid | 10 | Pool fire | 35.5 kW m$^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW m$^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW m$^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW m$^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW m$^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW m$^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW m$^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW m$^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW m$^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW m$^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW m$^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW m$^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW m$^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_20 | Piping from distillate oil manifold to Unit 3 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_21 | Piping from distillate oil manifold to Unit 4 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_22 | Piping from distillate oil manifold to Unit 5 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_23 | Piping from distillate oil manifold to Unit 6 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_24 | Piping from distillate oil manifold to Unit 7 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_25 | Piping from distillate oil manifold to Unit 8 | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_26 | Unloading arm at oil unloading berth/ heavy load berth | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 14 | 14 | 14 | 14 |
| | | | | | 9.8 kW $m^{-2}$ | 23 | 24 | 28 | 22 |
| | | | | Flash fire | LFL | 16 | 16 | 17 | 15 |
| DO_27 | Fuel oil bunkering line from unloading arm to distillate oil tanks through fuel oil strainer | Liquid | 10 | Pool fire | 35.5 kW $m^{-2}$ | 6 | 6 | 7 | 6 |
| | | | | | 28.3 kW $m^{-2}$ | 8 | 8 | 9 | 7 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 11 | 13 | 10 |
| | | | | | 9.8 kW $m^{-2}$ | 15 | 15 | 16 | 15 |
| | | | | Flash fire | LFL | 9 | 10 | 11 | 9 |
| | | | 25 | Pool fire | 35.5 kW $m^{-2}$ | 9 | 9 | 9 | 9 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 28.3 kW $m^{-2}$ | 9 | 9 | 9 | 9 |
| | | | | | 19.5 kW $m^{-2}$ | 11 | 12 | 13 | 11 |
| | | | | | 9.8 kW $m^{-2}$ | 22 | 23 | 26 | 21 |
| | | | | Flash fire | LFL | 13 | 13 | 14 | 12 |
| | | | 50 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 17 | 17 | 17 | 17 |
| | | | | | 9.8 kW $m^{-2}$ | 24 | 25 | 29 | 23 |
| | | | | Flash fire | LFL | 18 | 18 | 19 | 17 |
| | | | 100 | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 33 | 33 | 33 | 33 |
| | | | | | 9.8 kW $m^{-2}$ | 39 | 40 | 45 | 38 |
| | | | | Flash fire | LFL | 23 | 23 | 24 | 23 |
| | | | Full bore | Pool fire | 35.5 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 28.3 kW $m^{-2}$ | 0 | 0 | 0 | 0 |
| | | | | | 19.5 kW $m^{-2}$ | 40 | 40 | 40 | 40 |
| | | | | | 9.8 kW $m^{-2}$ | 47 | 48 | 54 | 46 |
| | | | | Flash fire | LFL | 25 | 25 | 26 | 25 |

*Table 5D.4 Results of Consequence Analysis for Carbon Dioxide Facilities*

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| CD_01 | Additional carbon dioxide road tanker to 1st CCGT unit | Liquid | 25 | Toxicity | 107,713 ppm | 4 | 4 | 4 | 4 |
| | | | | | 91,933 ppm | 4 | 4 | 4 | 4 |
| | | | | | 68,902 ppm | 5 | 5 | 5 | 5 |
| | | | Catastrophic Rupture | Toxicity | 107,713 ppm | 16 | 17 | 20 | 17 |
| | | | | | 91,933 ppm | 17 | 18 | 22 | 18 |
| | | | | | 68,902 ppm | 20 | 21 | 26 | 20 |
| | | | | Overpressure | 0.3 bar | 24 | 24 | 24 | 24 |
| CD_02 | Carbon dioxide manifold for 1st CCGT | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_03 | Piping from carbon dioxide manifold to 1st CCGT unit | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_04 | Additional carbon dioxide road tanker to 2nd CCGT unit | Liquid | 25 | Toxicity | 107,713 ppm | 4 | 4 | 4 | 4 |
| | | | | | 91,933 ppm | 4 | 4 | 4 | 4 |
| | | | | | 68,902 ppm | 5 | 5 | 5 | 5 |
| | | | Catastrophic Rupture | Toxicity | 107,713 ppm | 16 | 17 | 20 | 17 |
| | | | | | 91,933 ppm | 17 | 18 | 22 | 18 |
| | | | | | 68,902 ppm | 20 | 21 | 26 | 20 |
| | | | | Overpressure | 0.3 bar | 24 | 24 | 24 | 24 |
| CD_05 | Carbon dioxide manifold for 2nd CCGT | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_06 | Piping from carbon dioxide manifold to 2nd CCGT unit | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_11 | Carbon dioxide road tanker to the existing facilities | Liquid | 25 | Toxicity | 107,713 ppm | 4 | 4 | 4 | 4 |
| | | | | | 91,933 ppm | 4 | 4 | 4 | 4 |
| | | | | | 68,902 ppm | 5 | 5 | 5 | 5 |
| | | | Catastrophic Rupture | Toxicity | 107,713 ppm | 16 | 17 | 20 | 17 |
| | | | | | 91,933 ppm | 17 | 18 | 22 | 18 |
| | | | | | 68,902 ppm | 20 | 21 | 26 | 20 |
| | | | | Overpressure | 0.3 bar | 24 | 24 | 24 | 24 |
| CD_12 | Carbon dioxide storage tank | Liquid | 10 | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | 25 | Toxicity | 107,713 ppm | 4 | 4 | 4 | 4 |
| | | | | | 91,933 ppm | 4 | 4 | 4 | 4 |
| | | | | | 68,902 ppm | 5 | 5 | 5 | 5 |
| | | | Catastrophic Rupture | Toxicity | 107,713 ppm | 16 | 17 | 20 | 17 |
| | | | | | 91,933 ppm | 17 | 18 | 22 | 18 |
| | | | | | 68,902 ppm | 20 | 21 | 26 | 20 |
| | | | | Overpressure | 0.3 bar | 24 | 24 | 24 | 24 |
| CD_13 | Carbon dioxide manifold section 1 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_14 | Carbon dioxide manifold section 2 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_15 | Piping from carbon dioxide manifold to Unit 1 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_16 | Piping from carbon dioxide manifold to Unit 2 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_17 | Piping from carbon dioxide manifold to Unit 3 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_18 | Piping from carbon dioxide manifold to Unit 4 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |

| Section | Description | Phase | Leak Size (mm) | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2.5B | 3.0D | 7.0D | 2.0F |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_19 | Piping from carbon dioxide manifold to Unit 5 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_20 | Piping from carbon dioxide manifold to Unit 6 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_21 | Piping from carbon dioxide manifold to Unit 7 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |
| CD_22 | Piping from carbon dioxide manifold to Unit 8 | Vapour | 10 | Toxicity | 107,713 ppm | 1 | 1 | 1 | 1 |
| | | | | | 91,933 ppm | 1 | 1 | 1 | 1 |
| | | | | | 68,902 ppm | 2 | 2 | 2 | 2 |
| | | | Full bore | Toxicity | 107,713 ppm | 2 | 2 | 2 | 2 |
| | | | | | 91,933 ppm | 2 | 2 | 2 | 2 |
| | | | | | 68,902 ppm | 3 | 3 | 3 | 3 |

*Table 5D.5 Results of Consequence Analysis for Vapour Cloud Explosion at PESs*

| Tag | Hazard Effects | End Point criteria | Hazard extent (m) | | | |
|---|---|---|---|---|---|---|
| | | | 2.5B | 3.0D | 7.0D | 2.0F |
| PES 1 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 2 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 3 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 4 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 5 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 6 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 7 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 8 | Overpressure | 0.3 bar | 55 | 55 | 55 | 55 |
| | | 0.1 bar | 163 | 163 | 163 | 163 |
| PES 9 | Overpressure | 0.3 bar | 48 | 48 | 48 | 48 |
| | | 0.1 bar | 143 | 143 | 143 | 143 |
| PES 10 | Overpressure | 0.3 bar | 48 | 48 | 48 | 48 |
| | | 0.1 bar | 143 | 143 | 143 | 143 |