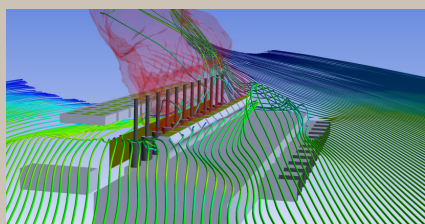
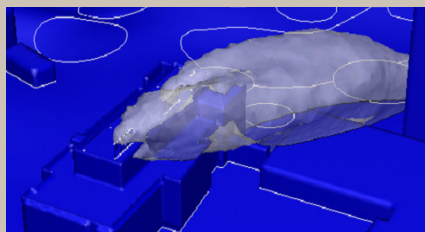
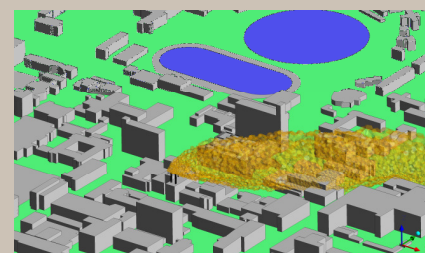
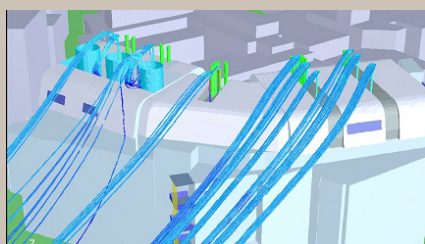


“Where will our knowledge take you?”

Computational Fluid Dynamics (CFD) In Built Environment



Fume gas from university laboratory building (Top)
U of Melbourne FABP building plume study(Second
from Top), Toluene gas dispersion from agricultural
laboratory building (Third from Top) Exhaust gas
concentration on the surface and air intakes of the
new building (Second from Bottom), Exhaust gas
from engine enclosures (Bottom)

Atmospheric dispersion modelling

BMT WBM has extensive experience of assessing the environmental impact of all manner of developments and sources on ambient air quality. This includes exhaust and fume dispersion from buildings, temperature impact on helipads, dust collection design review for the mineral export shed, and environmental impact assessment for the exhaust of diesel machineries. Our expertise supports the design and assessment of stacks and mitigatory measures to reduce emissions and their impact on the environment.

BMT's typical assessments consider factors such as topography, solar load, buoyancy, neighbouring building effects, annual winds and atmospheric stability in the modelling which are often poorly treated. A high degree of competence is also provided to select the most appropriate model, to specify appropriate input data and most importantly to evaluate the results.

By utilising BMT WBM's visual CFD results, engineers and designers have a greater opportunity to make quick and confident decisions early based on and scientific data. This saved potential re-construction costs, improved performances and minimized risks during operations.

BMT WBM's modelling experience included the following key service area:

- Gas dispersion impact from building stacks
- Fume and Odour dispersion from laboratory buildings
- Exhaust gas impact on helipads on buildings and off-shore oil and gas platforms
- Fire and smoke propagation from buildings
- Radiation, Solar load, and temperature rise on the buildings
- Indoor and Outdoor air quality modelling

To communicate with a CFD specialist at
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