

Explosives safety planning, made visible.

Visual planning, explainable assessments and traceable documentation for explosives safety professionals.

AEMS takes an explosives storage site from a drawing to checked, explained and documented quantity-distance results - every required distance read from rule data copied from AASTP-1 Ed D and checked by hand.

From findings to a compliant depot

✗ Not compliant

1 of 29 neighbours is too close. Worst: H-6 needs 472 m, has 441.5 m (30.6 m short).

2 information only

per AASTP-1 Ed D - NOT FOR OPERATIONAL USE ⓘ

⚠ Draft - check every step before acting on it: AEMS works the advice out from the site as drawn and entered (every pair before and after the moves, the move list in order), not from what is on site.

Distances and capacity - with the site as it is:

1. Move **DEM-10** (Charge, demolition 10 kg (synthetic)) - 135 items, 1,350 kg - from OS-3 to **OS-1** (140 m away).

After it: OS-3 ✓ **Compliant** · OS-1 ✓ **Compliant**

✓ OS-3: keeps every distance after the move

✓ OS-1: takes it - every distance kept, ✓ under Table 5

1 · Find it. AEMS measures every pair and shows which one falls short - and by how much.

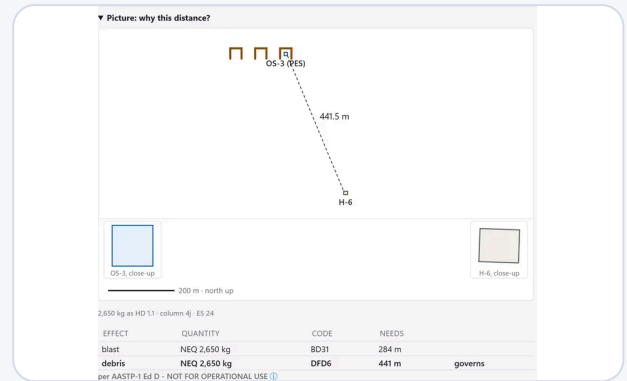
2 · Fix it. One move with the storages the depot already has, checked on the whole site before you act.



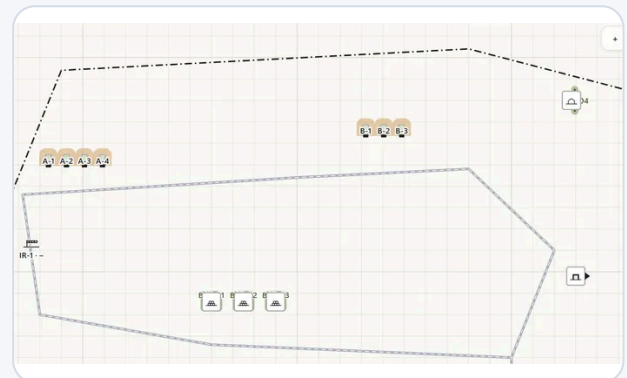
3 · See who is protected. After the fixes, the school and the hospital stand outside the vulnerable-building line AEMS draws, every house outside the inhabited-building line. 3D illustration of the synthetic depot; lines from AEMS.

What AEMS does

Plan	The site to scale on a local metric grid: storages with doors and orientation, buildings, roads, power lines, fences, barricades, earth cover.
Assess	Closest-point distances for every pair. Hazard divisions 1.1 to 1.6, mixing and aggregation under AASTP-1 Ed D.
Explain	"Picture: why this distance?" for any pair: the effect that governs, the table column, the exposed-site type.
Contents	Inventory from an Excel template made for the site; net explosive quantity (NEQ) and maximum credible event (MCE) from the items; AASTP-1 Table 5 compatibility; capacity per storage.
Change	Moves between the storages you have, checked on the whole site; where none works, AEMS says a risk acceptance is required.
Safeguarding	Inhabited-building and vulnerable-building lines for the current and the allowed quantities, on screen and printed to scale.
Documents	QD sheets in the AASTP-1.1 Annex A layout, a licence proposal, the safeguarding map, door cards, the emergency plan, inspection forms.



Every result shows why (OS-3 - H-6 after the fix).



The site to scale.

Built and checked case by case

2,460

automated tests, all passing on this revision

777

rule-data entries, each with a recorded manual check against the standard

12

synthetic test depots with hand-checked expected results

10

internally accepted demo iterations

Site data is computed in your browser and saved as a file on your computer. AEMS has no server-side database. Every distance is labelled with the standard it comes from. Counted on AEMS 0.11.0 (b7a732a), 27 Oct 2026.

Talk to us about an evaluation. A live, screen-shared walkthrough on synthetic sites - request one at aemsdefence.com/contact or write to contact@aemsdefence.com.