

EON WORK INTELLIGENCE - SITUATION ROOM

The Mining Situation Room

Operate the mine. Recognize the moment.
Survive what comes next.

WHY / WHAT / HOW

 EON AI Ventures



WHY

The dangerous moment happens before the alarm.

- Mining risk crosses three worlds: surface pit, underground, and processing and tailings.
- The product leads with operation and catastrophes - not a maintenance course.
- Each card makes the moment memorable, then routes the learner to the right knowledge and practice.



WHY - THE GAP

A safety catalog people choose to open

THE PROBLEM

- Traditional material separates the incident, the machine and the decision.
- Rules can be correct but still fail to build judgment under pressure.

THE OPENING

- Cinematic cards create attention without showing victims or gore.
- Persona routing connects every role to the right equipment class and site hazard.



WHAT

A Simulation catalog of mining incidents

30 situations - each classified, routed and media-approved.

The storefront makes serious operational knowledge feel immediate and worth opening.



WHAT - THE SHELVES

Three worlds organize the catalog

SURFACE PIT

Haul & mobile • drilling & blasting • pit-wall & ground • roads

UNDERGROUND

Ground control • gas & explosion • ventilation & inrush • mobile

PROCESSING & TAILINGS

Crushing & milling • conveyors • slurry & pumping • tailings dams

CROSS-CUTTING: Maintenance & Stored Energy is one bounded genre, not the frame.



WHAT - PERSONAS

The same incident routes differently by role



Haul-truck operator

runaway • blind spot • dump edge

Underground miner

ground • gas • escape • inrush

Plant operator

crusher • conveyor • slurry

Shift supervisor

signals • escalation • coordination

Maintenance / LOTO

stored energy • restart

Geotech / TSF engineer

highwall • monitoring • tailings

Top Picks begins as a transparent rules-based match - no invented AI personalization.

WHAT - THE CARD

One card is an incident plus a competence route

WHAT / WHY / HOW

Plain-language incident logic

EVIDENCE

Official report, alert or dataset

SPINE

Equipment class or site hazard

TAGS

World, hazard and human factors

SEVEN VISIBLE LEARNING ELEMENTS

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification



ASK BRAINY

Ask Brainy captures the knowledge people rarely write down

TACIT KNOWLEDGE ABOUT THE INCIDENT

- What experienced people notice first: sound, vibration, road feel, dust or water movement.
- Which weak signals matter - and which normal-looking signs can mislead.
- What the role should do next: stop, isolate, withdraw or escalate.
- Answers stay grounded in approved sources and never invent site procedures.



HOW

Built honest - cited, gated and human-free

Corpus → adversarial fact-check → storefront → approved media



HOW - THE GATES

Every claim and every Safety Simulation must pass



1 - SOURCE

Official report, regulator alert, dataset or standard.

2 - FACT CHECK

Separate case truth, frequency truth and control guidance.

3 - ETHICS

No victims, gore, speculative blame or customer naming.

4 - MEDIA QA

Check subject, style, safety, rigidity and false detail.

THE 30 INCIDENTS



Thirty cards - three balanced sets

10 catastrophes

10 frequent patterns

10 world-balancing operational moments

Every card has an approved Gemini poster. Corpus research and adversarial review remain the gate for published claims.



Brumadinho B1 tailings-dam failure

Processing & Tailings

TAILINGS

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Flagship TSF failure; official Brazilian sources; human-free site and aftermath treatment.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

COMING ONLINE - content and functionality are built only after their owners approve the route.



Soma underground mine fire

Underground

OPERATION

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Fire, smoke, evacuation and emergency systems; official record required.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

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Upper Big Branch methane / coal-dust explosion

Underground

OPERATION

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

MSHA investigation; ventilation, methane and dust-control lessons.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

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Pike River methane explosion

Underground

OPERATION

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Royal Commission anchor; monitoring, ventilation, governance and response.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

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Course Material

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Fundao / Mariana tailings failure

- Processing & Tailings
- TAILINGS
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Landmark TSF case; only official findings and factual naming.

ROUTED LEARNING - REPRESENTED ON THE CARD

- EON Life
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Buffalo Creek impoundment failure

Processing & Tailings

TAILINGS

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Historic impoundment case, subject to primary-source gate.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

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Crandall Canyon ground collapse

Underground

GEOTECH

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Ground-control and rescue-risk case; official investigation required.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

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Sunshine Mine fire

Underground

OPERATION

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Smoke, escape, self-rescue and communications.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Underground intrush / inundation flagship

Underground

GEOTECH

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Strongest official-report case chosen during corpus work.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Open-pit highwall collapse flagship

- Surface pit
- GEOTECH
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Officially investigated movement and evacuation case; site hazard.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Haul truck - light vehicle blind-spot collision

- Surface pit
- MOBILE EQUIPMENT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Powered-haulage pattern; ranking awaits reproducible MSHA query.

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FREQUENT



Haul truck runaway on downgrade

- Surface pit
- MOBILE EQUIPMENT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Braking, grade, speed and escape-route decisions; rigid-frame haul truck.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



Truck reverses through or over a dump edge

- Surface pit
- MOBILE EQUIPMENT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Dump-point berm, approach and visibility pattern.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



Conveyor entanglement during operation or cleaning

Processing & Tailings

FIXED PLANT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Belt conveyor; line-of-fire and verified-isolation decisions.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



Caught in moving crusher or feeder machinery

Processing & Tailings

FIXED PLANT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Crusher and feeder classes; operating moment first.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



Fall of roof or back during active work

Underground

GEOTECH

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Ground control with roof bolter or continuous miner where applicable.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Fall of face, rib, side or highwall

- Surface + Underground
- GEOTECH
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Controlled accident class separating ground failure from machinery.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



LHD or underground truck strikes a pedestrian

Underground

MOBILE EQUIPMENT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Visibility, communication and exclusion-zone pattern.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

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FREQUENT



Unexpected machinery movement during work

- All worlds
- MAINTENANCE
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Stored energy pattern; one bounded maintenance genre.

ROUTED LEARNING - REPRESENTED ON THE CARD

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FREQUENT



Electrical contact or arc at plant equipment

Processing & Tailings

MAINTENANCE

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Switchgear, MCC and isolator; official case and standard required.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

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Blast misfire or flyrock enters an occupied area

- Surface pit
- OPERATION
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Drilling and blasting operating decision.

ROUTED LEARNING - REPRESENTED ON THE CARD

- EON Life
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Dozer works too close to a highwall or dump edge

- Surface pit
- MOBILE EQUIPMENT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Track dozer plus a highwall site hazard.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Water cart loses control on a haul road

- Surface pit
- MOBILE EQUIPMENT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Road, grade, visibility and mobile interaction.

ROUTED LEARNING - REPRESENTED ON THE CARD

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Loss of primary ventilation

- Underground
- FIXED PLANT
- MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Atmospheric emergency linked to the primary ventilation fan.

ROUTED LEARNING - REPRESENTED ON THE CARD

- EON Life
- Ask Brainy
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Roof support installation under changing ground

Underground

GEOTECH

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Operate roof bolter or shotcrete rig while reading ground.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

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Certification

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Underground vehicle fire and evacuation

Underground

MOBILE EQUIPMENT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Mobile fire, smoke and escape; LHD or underground truck.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

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Crusher blockage cleared while feed can restart

Processing & Tailings

FIXED PLANT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Operation-to-isolation transition at crusher and feeder.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

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MCQ

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Certification

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SAG mill liner / reline stored-energy event

Processing & Tailings

MAINTENANCE

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Deliberately bounded maintenance card linked to SAG mill and crane.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

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Slurry line or pump release under pressure

Processing & Tailings

FIXED PLANT

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

Pressurized abrasive slurry and centrifugal slurry pump.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

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Tailings water-balance warning ignored

Processing & Tailings

TAILINGS

MEDIA APPROVED - SOURCE GATE

WHY IT BELONGS

GISTM-linked operating and governance card; no invented telemetry.

ROUTED LEARNING - REPRESENTED ON THE CARD

EON Life

Ask Brainy

Course Material

EON XR Simulator

MCQ

Oral Exam

Certification

COMING ONLINE - content and functionality are built only after their owners approve the route.

From the front door to field competence

**1 - FEEL IT**

Situation Room cards

2 - KNOW IT

Ask Brainy + course material

3 - PRACTICE IT

EON Life + XR simulator

4 - PROVE IT

MCQ + oral exam + certification