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EMERGENCY PLANS

Shopland Miskolc Avas retail center

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INTRODUCTION AND OBJECTIVES

This Emergency Plan is a comprehensive preparedness and response guide for Shopland Miskolc Avas retail center in Miskolc, Hungary. It is designed to meet and exceed statutory life-safety requirements by also protecting property and the environment, in line with BREEAM In-Use *Rsl 06* criteria. The plan addresses likely emergency scenarios (fire, security incidents, natural hazards, etc.) over a defined ten-year period (2025–2035) with consideration of future climate-related risks. Key objectives include:

- **Life Safety:** Safeguard all occupants (shoppers, tenants' staff, visitors) during emergencies through prompt warning, evacuation or shelter, and coordination with emergency services.
- **Property Protection:** Minimize damage to the building and assets through preventive measures and efficient incident response (e.g. fire suppression, securing facilities during storms). Maintaining operational continuity and asset value is a priority
- **Environmental Protection:** Prevent or contain pollution and other environmental impacts during incidents (such as chemical spills or fire-fighting runoff) to protect local soil, water and air quality
- **Regulatory Compliance and Beyond:** Fulfill all Hungarian safety laws and regulations (fire safety, evacuation drills, etc.) while going beyond the minimum by integrating climate resilience and environmental measures. This proactive approach aligns with BREEAM's aim to "encourage emergency plans that go beyond statutory requirements".
- **Stakeholder Confidence:** Provide a clear framework for emergency roles, communication, and recovery that instills confidence in tenants (including the anchor tenant occupying ~70% of floor area), the facility management team, and external stakeholders (owners, insurers, auditors). The plan is written in English (for international audit purposes) and can be translated/explained in Hungarian for on-site staff as needed.

Scope: This plan covers all relevant natural hazards, fire scenarios, and security risks identified for the site, and includes an assessment of both acute events (e.g. storms) and chronic conditions (e.g. drought) expected over the next decade. It defines emergency management strategies for the whole building (common areas and tenant spaces) and outlines coordination mechanisms between the property management and the multiple tenants.

RISK ASSESSMENT SUMMARY (LOCATION-SPECIFIC HAZARDS)

The risk assessment summary is informed by several completed evaluations addressing safety, fire, and natural hazards specific to the Miskolc Avas retail centre. The following assessments have been prepared:

- RSL01 – Flood risk assessment
- RSL03 – Natural hazard risk assessment
- RSL09 – Fire hazard risk assessment
- RSL10 – Security risk assessment

These documents provide a robust foundation for identifying site-specific risks, evaluating their likelihood and impact, and specifying effective mitigation strategies. Their comprehensive analysis supports both legal compliance and best practice standards within the emergency planning process. The table below summarizes key hazards, their likelihood and impact levels, and mitigation measures:

HAZARD	LIKELIHOOD	IMPACT SEVERITY (PEOPLE/PROPERTY/ENV)	RISK LEVEL	NOTES / MITIGATION MEASURES
Fire (Building/Structure)	Low	High – Threatens life and property	Medium	Sprinkler and alarm systems installed, regular fire drills and equipment maintenance in place. Immediate evacuation and fire service response are the protocol.
Extreme Heatwave	High (Summer)	Moderate – Heat stress for occupants; increased cooling demand, potential A/C failure	Medium	Heat action plan: monitor heat warnings, ensure HVAC performance, provide cool areas and hydration for occupants. Significant projected increase in frequency, duration, and intensity (RCP 8.5)
Drought & Water Shortage	Medium-High (Summer)	Low (direct safety impact) / Moderate (operational) – Water supply restrictions, landscaping loss, fire suppression water limited	Moderate	Medium environmental drought risk; water supply remains very good (Aquaduct 4.0) Water conservation measures in place (rainwater harvesting for irrigation, low-flow fixtures). Coordinate with utility on any water use restrictions. Ensure firefighting reserves (e.g. storage tank) are maintained during drought.
Severe Windstorm / Thunderstorm	Medium	Medium – High winds can cause structural damage (roof, facade), falling debris; power outages	Medium	Stable risk, minimal increase; slight favorable trend (RCA4/EC-EARTH). Storm preparedness: secure loose outdoor items, trim trees near building, reinforce signage. Backup power system to maintain lighting and critical systems during

HAZARD	LIKELIHOOD	IMPACT SEVERITY (PEOPLE/PROPERTY/ENV)	RISK LEVEL	NOTES / MITIGATION MEASURES
				outages. Post-storm inspection protocol for damage.
Heavy Rain / Flash Flooding	Medium -Low	Moderate – Localized flooding of car park or ground floor; water damage to property and electrical systems	Medium	Minimal increase (≈0.3 days/year); localized impacts only (RCA4/CNRM-CM5). The site has drainage systems; maintain and clear roof gutters and storm drains. Pump available for water removal.
Snowstorm / Extreme Cold	Low - Moderate	Moderate – Snow/ice can hinder access, cause roof load issues, pipe bursts	Low	Winterization plan: snow removal contracts in place, roof load monitored, Communicate travel safety to tenants during heavy snow.
Flood (Flash, River, Coastal)	Low	Low (Localized ponding)	Low	No river or coastal flood risk; localized ponding only
Hazardous Material Spill / Pollution Incident	Low	Moderate – Chemical spill (e.g. cleaning chemicals, fuel) can harm health, property, and local environment (water/soil)	Low	Hazardous materials are minimal on site (cleaners). Spill response plan and kits available: contain spill, ventilate area, use absorbents, stop source and prevent spread. Emergency services (and environmental authority) to be notified if there is a major spill or risk to waterways. Regular staff training on handling and disposal of hazardous substances.
Security Threat (Bomb Threat, Violent Intruder)	Low	High – Could endanger lives and cause property damage/panic	Medium	Security measures in place (24/7 security personnel, CCTV, access control). Clear protocols for bomb threats (evacuation and police notification) and for violent intruders (lockdown or evacuation as appropriate, police coordination). Periodic drills or tabletop exercises with tenants to ensure preparedness.
Medical Emergency (Injury/Illness)	Medium	Moderate – Individual health emergencies (heart attack, accident) need swift response	Medium	On-site staff trained in first aid and AED (defibrillator available). Procedure to call ambulance (112) and guide responders to the location. Drills include medical emergency simulations.

EMERGENCY ROLES AND RESPONSIBILITIES

Effective emergency response requires clearly defined roles with assigned responsibilities. The following key roles are established for the retail centre:

ROLE / TITLE	RESPONSIBILITIES
General Manager (Building Management)	– Overall, in charge during any emergency until authorities take over. – Initiates the emergency response, makes key decisions (e.g. evacuation vs. shelter) in coordination with emergency services. – Ensures *Emergency Plan* activation and that all response teams (security, engineering, tenant reps) are mobilized. – Liaises with city emergency responders (fire brigade, police, disaster management) upon their arrival and provides site information. – Communicates all-clear or further instructions once the situation is under control.
Facility Manager	– Maintains building systems (electrical, HVAC, water) and takes action to protect property (e.g. shut off gas valves, electricity) if needed to prevent damage or secondary hazards. – Assesses facility structural or systems status during and after incidents (e.g. checking for fire spread, water leaks, or damage after a storm). – Coordinates repairs and recovery of building services as part of business continuity.
Security Team Lead and Officers	– Usually, first on scene for any alarm or incident; immediately investigates and notifies the General Manager. – Calls 112 to contact Fire, Ambulance, or Police as required, providing clear details of the situation. – Guides occupant evacuation or lockdown per the plan, assists people with disabilities to reach safety. – Secures the site (preventing re-entry or unauthorized access during the emergency) and keeps emergency routes clear. – Maintains communication (via radio or PA system) throughout the incident and assists emergency services (e.g. directing fire fighters to the fire location).

ROLE / TITLE	RESPONSIBILITIES
Tenant Emergency Coordinator	– Act as the point of contact between their tenant space and building management during emergencies. – Ensure their staff and customers follow the building's emergency procedures (evacuate to assembly points or shelter as directed). – Account for all their employees at the assembly area and report status to the Emergency Coordinator. – Disseminate emergency information and training within their store/units (so all employees know what to do). The anchor tenant's coordinator takes extra responsibility given the large occupant load, working closely with building security.
Floor Wardens / Fire Wardens	– Volunteers or appointed staff within each tenant space who assist in evacuations (sweeping areas to ensure everyone evacuates, aiding persons needing assistance). – Receive training from building management in alarm procedures and use of fire extinguishers. – Report to Tenant Emergency Coordinators or Security once their area is cleared or if anyone is trapped.
Environmental Health & Safety Officer (Property Management or Delegate)	– Monitors compliance with environmental and safety protocols (e.g. proper storage of hazardous materials, readiness of spill kits). – During a pollution incident (spill), leads the initial containment effort and coordinates with external hazmat responders. – Provides technical guidance on cleanup to minimize environmental impact. Also involved in post-incident environmental reporting.
Emergency Services (Fire, Police, etc.)	– Ultimate authority for life safety once on siteerikson.edu. The city Fire Brigade or other responding agency will assume command of emergency operations upon arrival, as legally mandated. – Building management and security will support and follow the instructions of these authorities (providing building plans, hazardous material info, utility shutoff locations, etc.).

Note: All building staff and tenant representatives must be familiar with their roles and those of others. Names and 24/7 contact details for individuals in the above roles are listed in *Appendix A*

of the full plan (updated whenever personnel changes). This information is communicated to all building users (e.g. tenant handbooks) so everyone knows who to turn to during an emergency. Regular coordination meetings are held between the property management and tenant safety representatives to review roles and ensure alignment of this plan across the multi-tenant facility.

EMERGENCY RESPONSE PROTOCOLS BY HAZARD TYPE

This section provides step-by-step response procedures for various emergency scenarios. For each hazard, the protocol outlines immediate actions, communication steps, and measures to protect people, property, and the environment. These procedures follow an all-hazards approach recommended for building emergency plans and are tailored to the specific risks identified for our site. In all cases, life safety is the top priority – property protection actions are only taken if time permits and without endangering anyone.

FIRE OR EXPLOSION

This protocol closely follows the facility's official Fire Alarm Response Plan (Tűzriadó Terv), adhering strictly to the Hungarian fire safety laws (1996. évi XXXI. törvény; 101/2023. (XII.29.) BM rendelet). It provides step-by-step instructions for effectively managing fire emergencies, ensuring safety for all building users and minimizing potential damage.

1. **Fire Detection and Initial Alarm**

   Automatic Detection: The facility is equipped with intelligent addressable fire alarm systems capable of automatically detecting smoke and heat. Alarms triggered by these detectors alert the central fire alarm control immediately, initiating an automatic alert to the local fire brigade.

   Manual Alerting: In addition, manual fire alarm call points are placed strategically throughout the building. Upon discovery of a fire or smoke, any employee or occupant should immediately activate the nearest call point.

2. **Immediate Notification of Emergency Services:** Following detection or manual activation of a fire alarm, facility staff must immediately call the emergency number (112). Clearly and calmly communicate:

   - Exact location of the fire within the building, including internal accessibility details if necessary.
   - What materials are burning or at immediate risk.
   - Whether human life is endangered or if occupants are trapped.
   - Caller's name and direct callback phone number.

   Security or management personnel should confirm that emergency services have received and acknowledged the alarm.

3. **Occupant Evacuation Procedures:** Upon the sounding of the fire alarm, occupants will be promptly instructed via the facility's integrated public address system. Clear, calm, repeated announcements will guide occupants to the nearest evacuation routes. All occupants must evacuate immediately without delay. Staff are responsible for ensuring

orderly evacuation of visitors and vulnerable persons. Evacuation routes and designated assembly points are clearly marked on evacuation plans posted near each entry, and occupants must assemble at these points for roll-call. Annual fire evacuation drills are mandatory, executed at varying times of day, to ensure all staff and tenants are familiar with evacuation procedures under different conditions.

4. **Initial Firefighting Actions:** Personnel who detect or are present at the early stage of the fire and have received fire-safety training should attempt initial firefighting, provided it is safe to do so. Available firefighting equipment within the facility includes:

    - External hydrants located around the building perimeter.
    - Wall-mounted wet hydrants connected to the building's internal firewater network.
    - Automatic sprinkler systems covering critical areas for immediate suppression.
    - Hand-held fire extinguishers readily accessible in clearly marked locations throughout the building.

    Firefighting actions should cease immediately if they pose a risk to personnel or fail to quickly suppress the fire.

5. **Preventing Fire Spread:** If possible and safe, remove nearby flammable or combustible materials not yet ignited, preventing further fire spread. Close doors and windows (without locking them) in and around the fire-affected area to limit oxygen supply, fire spread, and smoke propagation.

6. **Detailed Communication and Coordination:** After alerting emergency services, promptly inform the following designated facility personnel to coordinate on-site emergency response:

    - **Facility Manager** (létesítmény felelős)
    - **Technical Facility Manager** (létesítményi technikus)
    - **Fire Safety Officer** (tűzvédelmi megbízott)
    - **Fire Safety Expert** (tűzvédelmi szakértő)
    - **Occupational Safety Officer** (munkavédelmi megbízott)

    These individuals must immediately proceed to the incident location to support evacuation, initial firefighting, and liaison with emergency services upon arrival.

7. **Cooperation with Emergency Services:** Upon arrival, the local fire brigade immediately assumes command. The Facility Manager or designated representative must meet firefighters at the designated access point, providing vital information including:

    - Precise location and nature of the fire.
    - Presence and potential hazards (gas storage, hazardous materials, electrical equipment).
    - Status of evacuation efforts and any occupants unaccounted for.

Facility personnel are required to follow instructions explicitly provided by the fire brigade and support their operations as requested.

8. **Post-Incident Procedures:** Following containment and suppression of the fire, the Facility Manager, assisted by technical staff, conducts an initial damage assessment, documenting areas impacted and necessary repairs.

    - All safety equipment used (extinguishers, hydrants, sprinklers) must be checked, refilled, or replaced as necessary to restore full operational readiness.
    - A thorough incident review meeting must be conducted involving the Fire Safety Officer, Facility Manager, and other relevant personnel to analyze response effectiveness and identify improvement measures.
    - The results and actions from this review must be formally recorded and incorporated into future drills and fire safety training.

MEDICAL EMERGENCY

Example scenarios: Serious injury, collapse of a person, or other health incidents in the mall.

Response Actions:

1. **Secure the Area:** Upon noticing a medical emergency (e.g. a person fainting or a severe injury), nearby staff should immediately ensure the area is safe (e.g. move the person out of a crowded path or remove any ongoing hazard causing injury).

2. **Call for Help:** Dial **112** to request an ambulance. Provide the exact location in the centre (use store name or nearest entrance for reference) and describe the nature of the medical emergency (e.g. “unconscious adult, breathing but not responsive”). Security Control should also be notified via radio so they can facilitate response.

3. **First Aid:** Trained first-aiders (security staff or tenant staff with training) should begin appropriate first aid while waiting for the ambulance. An Automatic External Defibrillator (AED) is available [state location, e.g. at security desk]; if the victim is suspected to be in cardiac arrest, use the AED as instructed. For heavy bleeding, apply pressure, etc. Follow first-aid training protocols.

4. **Crowd Management:** Security officers will gently cordon the area to keep onlookers at a distance, ensuring the person has air and privacy, and to allow paramedics quick access upon arrival.

5. **Ambulance Arrival:** Security guides the ambulance crew from the main entrance to the patient (having sent someone to meet them). They also have any relevant information ready (if known, e.g. allergy info or events leading to injury).

6. **Post-Incident:** Record the incident in the log. The General Manager and tenant representative (if the person is a tenant’s employee) should follow up on the person’s condition. If the incident exposed any hazard (e.g. slippery floor causing a fall), address that hazard immediately to prevent recurrence.

7. **Note:** Medical emergencies, while typically not part of statutory fire plans, are included in this plan for completeness under an all-hazard approach. Regular training is provided so that a sufficient number of staff are certified in first aid.

HAZARDOUS SPILLS / POLLUTION INCIDENTS

This protocol covers accidents like a **chemical spill** (cleaning agents, fuel, paint, etc.) within the property, or an external pollution event (like a tanker truck accident nearby releasing toxic fumes). The objective is to contain and neutralize the hazard while protecting people and the environment.

On-Site Spill (e.g. chemical or oil in a store or maintenance area):

1. **Immediate Actions:** Whoever discovers the spill should warn others in the vicinity and avoid contact with the substance. If it's a small, manageable spill (like a liter of cleaning liquid) and you are trained, put on protective gloves and eyewear from the nearest Spill Kit station and attempt to stop the source (upright the container, shut a valve) if it can be done safely. For a large or dangerous spill (e.g. flammable solvent, or a chemical with strong fumes), activate the fire alarm or otherwise signal an emergency to evacuate the immediate area.

2. **Evacuate and Isolate:** Keep people away from the spill area. Security will cordon off the area and ensure ventilation (opening windows/vents if non-reactive fumes or shutting down HVAC return air to prevent spreading fumes through the mall, depending on the substance). If there's any fire risk (strong vapors, etc.), also follow fire safety steps and have extinguishers ready.

3. **Notify Authorities if Needed:** The Emergency Coordinator will call 112 if the spill is beyond our capacity or poses an immediate threat (for example, a large fuel spill, toxic gas release, or anything potentially reaching public waterways or drains). The Hungarian disaster management authority (Katasztrófavédelem) would dispatch a HazMat team for significant incidents.

4. **Containment and Cleanup:** Trained maintenance or environmental staff use absorbent materials from spill kits to contain the spread (diking around drains to prevent entry). Use appropriate neutralizers if available (e.g. lime for acid spills, etc.). All cleanup should be done with proper PPE (gloves, masks, etc.). Collected contaminated materials (soaked pads, earth, etc.) are placed in hazardous waste bags/containers for proper disposal per regulations.

5. **Ventilation:** If fumes or vapors were present (e.g. from solvents), ensure the area is well ventilated after cleanup to clear any hazardous atmosphere before people return. The HVAC system may be used to purge air if it's safe, or natural ventilation.

6. **All-Clear and Reporting:** Only reopen the area after the spill is fully cleaned and any lingering hazards (slippery floor, vapors) are gone. The incident is logged, including material involved and quantity. The HSE Officer will file any required environmental incident report (e.g., if a reportable quantity was exceeded, notifying the environmental authority). Learnings (why did it spill, how to prevent) are discussed and communicated.

External Pollution (e.g. Chemical Fire or Gas Release nearby): In case authorities alert of an external airborne hazard (industrial accident, train derailment, etc.):

- The Emergency Coordinator will **activate a Shelter-in-Place** order if advised (since going outside could expose people). Make an announcement for everyone to stay inside, close all doors and windows. The Chief Engineer will shut down the ventilation system to avoid sucking in toxic air from outside.
- If the threat is long-lasting or severe (e.g. toxic cloud), prepare for possible full evacuation if ordered by authorities: identify a safe upwind route and coordinate transportation if needed (though typically, authorities handle mass evacuation).
- Constant communication with local emergency services (112) will guide the response. Security ensures nobody exits into danger unknowingly and that those inside remain calm and informed.
- After the external incident passes or is contained, ventilation systems are purged and normal operation resumes when officials declare the area safe.

Preventive Measures: To reduce risk of on-site spills, all hazardous liquids (cleaners, oils, etc.) are stored in proper cabinets with secondary containment. The facility has labeled spill response kits in strategic locations (mechanical rooms, loading docks) and staff receive training in their use and in emergency spill procedures.

SECURITY THREATS (VIOLENCE OR BOMB THREAT)

Security emergencies, though less common, are included in our plan to ensure readiness for malicious threats (e.g. a bomb threat call, suspicious package, or an armed individual on the premises). We coordinate closely with police in such events.

Bomb Threat (via phone or found package):

- **Initial Response:** If a bomb threat is received by phone, the recipient should stay calm, gather as much information as possible (using a bomb threat checklist – e.g. ask when and where will it explode, note background sounds, voice details) and signal a colleague to inform Security simultaneously. Do *not* use radio transmitters or cell phones near a suspected device (to avoid triggering any electronics). If a suspicious package is found unattended and believed to be a bomb, treat it seriously.
- **Evacuation and Notification:** The General Manager, in consultation with Police (via 112), will determine whether to evacuate the building fully or partially. In most cases, a targeted evacuation will be done (i.e. clear the area around the suspicious package first). Use the fire alarm or PA system as appropriate to instruct people. Evacuate to the normal assembly points unless directed to an alternate by authorities.
- **Police Coordination:** Police bomb squad will take charge upon arrival. They will want building plans and may establish a perimeter. The Emergency Coordinator ensures all staff comply with police directions. If the entire centre is evacuated, security prevents re-entry until police give clearance.

- **All Clear:** After investigation, if a device is not found or safely removed, the police will give an all-clear. The Emergency Coordinator can then announce resumption of business. Meanwhile, handle any communication to media or public as per Section 7 (likely in coordination with police press officers).

Active Assailant / Armed Intruder:

- **Detection:** If someone reports or if CCTV shows an individual with a weapon or an act of violence, treat it as an immediate critical threat.
- **Alarm/Alert:** Unlike fire, a loud alarm may not be appropriate (could panic people or alert the attacker). Instead, a coded PA announcement might be used (e.g. “Security incident, please evacuate by the nearest exit calmly”). Security will call 112 at once to get police en route.
- **Actions:** Depending on situation, either *evacuate* people away from the danger area or *lockdown/shelter* in secure rooms. For instance, if an intruder is in one part of the mall, people in other safe areas should leave the building quickly and calmly (evacuate away from the threat), while those near the threat and unable to flee should lock themselves in back rooms or storage areas. Security personnel are not expected to confront an armed attacker (their role is to help people get to safety, not engage). They will, however, guide and assist evacuation as possible and provide real-time information to police (via phone).
- **Law Enforcement Takeover:** Once police arrive (which in urban areas should be within minutes), they assume control. They may enter in tactical teams to neutralize the threat. Our team’s job is to cooperate, e.g., giving access through service corridors or CCTV feeds if available.
- **Medical Aid:** After the threat is over, attend to any injured with first aid (once safe to do so) until paramedics take over.
- **Reunification and Support:** Such incidents cause extreme stress; the plan includes having a safe reunification point for separated family/groups after evacuation and arranging counseling services if needed for trauma. Senior management will also handle public communications in cooperation with law enforcement.

Preventive Security Measures: The centre’s daily security measures (CCTV monitoring, trained security guards) are aimed at deterring and detecting threats early. All staff are encouraged to report suspicious behavior (following the "See Something, Say Something" principle). Emergency drills or scenario discussions with tenants include lockdown and active shooter exercises, albeit infrequently, to ensure preparedness without causing an alarm. Clear communication and a calm, prepared response can save lives in these scenarios.

NATURAL HAZARD EMERGENCIES

Natural hazard emergencies outlined in this emergency plan are based on comprehensive assessments detailed in the reports RSL01 – Flood Risk Assessment and RSL03 – Natural Hazard Risk Assessment. **These assessments utilize climate projections aligned with the high-emissions scenario RCP 8.5**, highlighting the anticipated significant effects of climate change on

the Miskolc region. According to these projections, severe heatwaves, extended periods of drought, intense windstorms, heavy rainfall events, and significant snowstorms are expected to increase in both frequency and severity. Consequently, it is essential that the retail centre adopts a proactive approach in preparedness and responsiveness to effectively manage these escalating climate-related risks, safeguarding occupant safety, asset integrity, and environmental sustainability.

The table below categorizes the identified natural hazards into acute and chronic groups for clear reference:

Type of Hazard	Hazard	Risk Level	Projected Change (2021-2050)
Acute	Severe Windstorm / Thunderstorm	Low to Moderate	Stable risk; minimal expected increase in days with wind gusts ≥85 km/h
Acute	Flood	Low	Low risk; no river or coastal flooding expected, minimal localized ponding
Acute	Heavy Rainfall	Low to Moderate	Slight increase (≈0.3 days/year) in events ≥30 mm rainfall/day
Acute	Snowstorm	Low	Slight potential increase, not significant
Chronic	Extreme Heatwaves	Moderate to High	Marked increase in frequency, duration, and intensity
Chronic	Drought	Moderate	Increased seasonal variability, stable municipal water supply reliability

EXTREME HEATWAVE

During prolonged heatwave conditions (e.g., Hungary increasingly experiences temperatures ≥35°C for several consecutive days), the following protocol is activated to protect building users and maintain operations.

Recent analyses based on NATéR grid network meteorological data and ALADIN-Climate model outputs (medium-to-high emissions scenarios, RCP8.5) confirm a marked rise in heatwave frequency and severity in Hungary. Observational studies (2005–2014) already show measurable excess mortality attributable to heat stress, which is expected to grow as heat events become longer and more frequent. Projections for 2021–2050 indicate significantly hotter and more prolonged heatwaves, which will increase health risks for vulnerable populations and place additional strain on building infrastructure, particularly HVAC systems and energy supply.

Given these escalating climate risks, the following measures ensure occupant safety, operational continuity, and asset protection:

- **Heatwave Alert & Climate-Based Preparedness:** The Emergency Coordinator monitors heatwave warnings from the Hungarian Meteorological Service and evaluates them against climate-adjusted thresholds (anticipating more frequent red-level warnings by

2030–2050). Tenants and staff are alerted early, and preventive measures are initiated sooner than statutory thresholds to account for the projected higher intensity of heatwaves. The Chief Engineer inspects HVAC systems before peak heat periods, focusing on high-risk components, as climate projections suggest increased risk of cooling failures under prolonged high loads.

- **Thermal Comfort & Vulnerable Populations:** Cooling Prioritization: Indoor spaces are monitored to ensure temperatures remain below critical thresholds (25–27°C for general areas, 23°C for sensitive areas like pharmacies and electronics stores). A cooling zone is designated in the building for vulnerable groups (elderly shoppers, children), anticipating higher heat-stress risks as indicated by sensitivity indicators (excess mortality data) in current research. Hydration stations are provided, and public announcements remind occupants to stay hydrated, directly addressing the increased health vulnerability to heatwaves in the Miskolc region.
- **Energy Load Management:** As no backup generator is installed, energy demand is actively reduced to prevent system overloads during grid strain (more frequent during heatwaves per RCP8.5 projections). Tenants are instructed to reduce non-essential equipment use during heat peaks. Critical cooling (pharmacies, IT rooms) is prioritized manually by facility management to maintain essential functions. If public grid stability warnings are issued, partial load-shedding plans are activated (e.g., dimming non-critical lighting, adjusting A/C settings in low-occupancy zones).
- **Monitoring & Medical Preparedness:** Security and staff are trained to identify early signs of heat stress in visitors, given the projected rise in heat-related health incidents. Any heat-related medical emergency follows the medical response protocol (Section 4.2), but during extreme heatwaves, first-aid posts are temporarily equipped with extra cooling packs and water.

Throughout a heatwave event, communications (Section 7) will issue regular updates to tenants about the situation and any changes in procedures. Once temperatures return to normal, the Emergency Coordinator will declare the heatwave protocol ended and resume standard operation.

DROUGHT AND WATER SUPPLY DISRUPTION

Drought conditions are projected to intensify in the Miskolc region due to climate change, increasing environmental and operational risks despite generally reliable water supply infrastructure. According to national assessments and expert analyses 1, Hungary—including the Miskolc area—is experiencing more frequent and prolonged droughts, with water scarcity no longer limited to summer months. These trends are driven by reduced winter precipitation, diminished snowmelt, and more frequent heatwaves, which deplete soil moisture and increase agricultural vulnerability.

While the Aquaduct Water Risk Atlas does not provide city-level data for Miskolc specifically, Hungary is broadly classified as medium drought risk, with a projected increase in short-term drought frequency and severity 2. This reflects growing seasonal variability in precipitation and heightened agricultural and environmental water stress.

Despite these risks, municipal and industrial water supply in Miskolc is expected to remain secure in the medium term, thanks to robust infrastructure and relatively stable groundwater reserves 2. However, the region's agricultural sector remains underutilized in terms of irrigation, with only 2–3% of farmland irrigated nationally 1. Plans are underway to expand water retention capacity and irrigation infrastructure, but implementation has been slow and complex.

Climate projections for 2021–2050 suggest more frequent and prolonged dry periods in Miskolc, particularly during summer, with indirect impacts such as increased fire hazard potential and soil-related structural stress 2. Therefore, local sustainability efforts should prioritize water conservation and resilience, focusing on environmental responsibility rather than immediate supply scarcity mitigation.**Monitoring and Early Actions:** The Emergency Coordinator monitor drought and seasonal precipitation forecasts, activating preventive measures early during heatwave periods when drought conditions are likely to worsen. Special attention is paid to combined heat-drought events, as climate models indicate a growing likelihood of concurrent hazards.

- **Environmental Conservation & Fire Preparedness:** Non-essential water use is minimized during extended droughts, even if supply remains secure, as part of the centre's sustainability strategy. Landscaping irrigation is reduced to essential levels, and drought-resistant plants are prioritized in long-term maintenance. Given increased fire hazards during prolonged dry conditions, the fire protection system (hydrants, sprinklers) is inspected more frequently to ensure full operational readiness.
- **Operational Continuity Under Drought Conditions:** Water supply disruptions are not expected, but in the unlikely case of a municipal restriction, critical uses (drinking water, sanitation, fire safety) will remain prioritized. Sprinkler storage should be checked of load, as fire hazards increase during droughts.
- **Structural & Asset Protection:** Extended droughts may cause soil shrinkage and micro-settlement, which can stress pavements and building foundations. Maintenance teams monitor early signs (cracks, door misalignments) during prolonged dry periods and schedule inspections accordingly.
- **Communication and Awareness:** Post signage in restrooms and tenant areas encouraging water conservation ("During the drought, please conserve water"). Educate cleaning staff on dry-cleaning methods or using disinfectants that require less water.
- **End of Drought:** When authorities declare the drought over or water supplies normalize, notify all parties that normal water use can resume, but also capture any lessons learned for future improvements (e.g. permanent installation of more water-efficient fixtures if not already done).

SEVERE WINDSTORM OR THUNDERSTORM

Windstorm risk in Miskolc is projected to remain relatively stable under climate change, with only minimal adverse impacts expected for the building stock. According to regional climate modeling efforts—including the RCA4/EC-EARTH model under the RCP8.5 scenario—no significant increase is expected in the annual number of days with wind gusts exceeding 85 km/h1. These

projections suggest that while windstorms may still occur, their frequency and intensity are not expected to rise substantially compared to current conditions.

Hungary's national vulnerability assessments also indicate that storm-related risks are moderate and stable, with no major increase in windstorm-related damage projected for urban areas like Miskolc 2. The city's location in a relatively sheltered basin and its existing building stock—largely constructed to withstand current wind loads—contribute to this resilience.

Therefore, the expected impact on local buildings is categorized as "slightly favorable", meaning that climate change is unlikely to exacerbate windstorm damage in the region. This allows local sustainability strategies to focus more on energy efficiency and climate adaptation rather than structural wind hazard mitigation.However, acute storms can still cause local damage, power outages, and safety hazards, so preparedness remains important.:

- **Advance Warning:** Typically, the Meteorological Service will issue a high-wind or severe thunderstorm warning. Upon receiving a warning (e.g. for storm with gale-force winds or hail), the Emergency Coordinator alerts all tenants of the expected timing and severity. Engineering staff will perform a quick grounds/building check: secure loose objects (outdoor signage, displays, trash bins), retract or fasten any outdoor awnings, and ensure roof hatches, doors, and windows are closed. Cars in the parking lot may be advised via public announcements to park away from large trees (if applicable).
- **During the Storm – Shelter-in-Place:** Once a severe storm is imminent or already hitting, keep everyone indoors. If winds become dangerously strong Security will direct occupants to move away from exterior glass and, if possible, gather in protected internal areas. Tenants are instructed to stop operations temporarily and assist customers in relocating to safe areas.Security ensures that no one remains in open-air parking areas or near entrances during the storm's peak.
- **Power Failure Contingency:** Strong storms may knock out power. Emergency lighting will automatically activate. If power is lost, Security will advise occupants to stay calm; if the storm has passed, some evacuations may be considered due to loss of lighting or HVAC, but generally it may be safer to keep people inside until the storm fully passes.
- **Communication:** Throughout the event, the Emergency Coordinator (or Security via handheld loudspeaker if PA is down) provides updates. Example: "The storm is currently overhead; please remain in safety zones. We have backup power supplying lights. Emergency crews have been notified." Maintain radio communication among staff. If any injury occurs (e.g. from broken glass or debris), treat it as a medical emergency.
- **After the Storm – Damage Assessment:** Once the winds and lightning subside, Security and Engineering will carefully inspect for damage: check for structural issues, broken glass, roof leaks. If the building is largely intact, the Emergency Coordinator can give the "all clear" for normal activity to resume, or partial clear if some shops must stay closed for repairs. All incidents are logged, and any minor damage is addressed immediately to prevent cumulative deterioration over time.
- **Coordination with Authorities:** If significant damage or injuries occurred, emergency services will be involved. Also, report any utility outages to the utility company (they may

already know, but ensure our site is on the restoration list). If outside assistance is needed (e.g. firefighting if lightning causes a fire, or city disaster management if widespread damage), call 112.

- **Preventive Review:** After such an event, evaluate how well preparations worked. For example, if a sign blew off, consider stronger fastenings; if a window shattered, install storm shutters or safety film in the future.

FLASH FLOODING AND WATER STRESS

Overall flood risk for the retail centre is classified as low. According to the RSL01 – Flood Risk Assessment, there is no identified riverine or coastal flood risk for the Miskolc Avas site due to its inland location and flat topography. The area is not subject to downstream flash flooding, as there are no significant hills or mountains nearby to generate rapid surface run-off.

Climate projections from the RCA4/CNRM-CM5 model (RCP8.5, 2021–2050) indicate that the average annual number of heavy rainfall days (≥30 mm/day) is expected to change only marginally (≈0.3 additional days/year), confirming that no significant increase in extreme rainfall events is projected in the mid-term.

Despite the low overall flood risk, localized water ingress and temporary surface ponding remain possible during isolated intense rain events, requiring regular maintenance and monitoring.

- **Flood Watch:** The Chief Engineer ensures all roof gutters, storm drains, and surface drainage systems are cleaned and maintained regularly, particularly before the rainy season. Weather warnings are monitored by the Facility Manager.
- **Leak Response:** Maintenance teams remain on standby with portable pumps and water-absorbent barriers to manage unexpected pooling. Electrical and sensitive equipment in ground-floor areas is stored on raised platforms where feasible to prevent water damage.
- **Aftermath and Recovery:** Once rain stops and water recedes, evaluate damage. The Chief Engineer will check electrical rooms, **drainage and roofs.** Any identified drainage blockages or sealing failures are corrected immediately to prevent progressive structural damage.
- **Reporting:** Significant incidents should be reported to the local authorities, especially if any pollution happened (e.g. oils from parking lot runoff entering public drains). Also inform the insurance provider for damage claims.

SNOWSTORM EMERGENCY RESPONSE

While the risk of snowstorms remains relatively low, slight increases in snowstorm frequency and severity are possible. To ensure the safety of occupants and the continuity of operations, the following proactive measures and response protocols are implemented:

- **Preparedness and Monitoring:** Regular monitoring of weather forecasts and snowstorm warnings issued by the Hungarian Meteorological Service. Facility management ensures adequate supplies of snow removal equipment, salt, and sand.

- **Snow Removal and Facility Access:** Deployment of snow removal teams and equipment to clear pedestrian walkways, entrances, and emergency routes. Parking areas and loading docks cleared and treated with salt or sand to prevent slipping hazards.
- **Facility Structural Checks:** Inspection and clearing of roof areas to prevent snow accumulation, which could pose structural hazards. Regular checks of heating systems to ensure they remain operational during extreme cold periods.
- **Communication and Safety Measures:** Continuous communication with tenants regarding facility accessibility and safety advisories. Provision of clear instructions to occupants on navigating safely within the facility during snowy conditions.
- **Post-Event Assessment:** Facility maintenance conducts thorough inspections to identify and rectify any damages or safety hazards resulting from snowstorms. Debriefing sessions to evaluate response effectiveness and identify opportunities for improvement.

BUSINESS CONTINUITY AND PROPERTY PROTECTION MEASURES

Emergencies can disrupt business operations and cause physical damage. This section outlines how the centre will ensure **business continuity** and protect property value, aligning with BREEAM's goal of maintaining asset operational value even under duress. While life safety is paramount, these measures help the retail centre recover quickly and minimize financial and service impacts:

- **Redundancies for Critical Systems:** To reduce downtime, critical building systems have redundancies. There is an uninterruptible power supply (UPS) for the IT server room and emergency lighting. Key data (sales records, CCTV footage) are backed up off-site or on cloud servers so that information is not lost in a disaster. Such foresight ensures that even if infrastructure is hit, the operational capacity can be recovered or maintained in some form.
- **Rapid Damage Assessment:** Immediately after an incident is contained (fire extinguished, storm passed, etc.), the facility team will perform an initial damage assessment. This includes a walkthrough of all affected areas to identify safety issues (unstable structure, water damage, residual hazards) and to estimate downtime for each section. We maintain up-to-date floor plans and asset registers to know what assets (equipment, stock) are in the impacted zones. Quick assessment allows informed decisions on cordoning off areas, starting repairs, and informing tenants of expected interruption length.
- **Salvage and Property Protection:** If safe to do so, staff may carry out salvage operations to protect property **after** life safety is secured. For instance, covering intact merchandise or equipment with tarps to prevent water damage after sprinklers or roof leaks, moving stock from a threatened area (like from a store beneath a small roof fire) once the fire is out, or safely drying out documents that got wet. We have supplies like plastic sheeting,

plywood, and pumps for this purpose. These actions can significantly reduce losses and speed up recovery.

- **Insurance and Restoration:** The property carries comprehensive insurance for various perils. The Emergency Coordinator will notify insurers within the required time after a major incident. We also have pre-vetted contracts with restoration companies (for fire cleanup, water damage restoration, environmental decontamination) to ensure immediate professional help.
- **Temporary Closure & Relocation Plans:** If a portion of the centre must close for repairs (e.g., after a large fire in one wing), management will work with affected tenants on temporary solutions. In worst case, if the entire centre must close (very unlikely, but e.g. after a major earthquake or similar), the Business Continuity Plan outlines coordination with local authorities and the anchor tenant's corporate offices to redirect customers (possibly to other branches or online) during rebuilding.
- **Supply Chain and Utilities:** Business continuity also considers supply chain. If a disaster in the region disrupts deliveries (roads closed, etc.), we maintain an inventory buffer of critical supplies. We have contact lists for alternate suppliers. Similarly, if a utility service (power, water) is expected to be out for an extended period, we will rent portable generators or water tankers as needed to keep essential services running. The centre's design includes the capability to connect these temporary systems.
- **Protecting Asset Value (Long-Term):** The resilience measures implemented all contribute to preserving the asset's long-term value in the face of climate change and other risks. By demonstrating that the asset can withstand and quickly recover from emergencies, we not only ensure safety and tenant retention but also protect the owner's investment.

In summary, business continuity and property protection planning means the difference between an emergency causing a brief inconvenience versus a prolonged closure. This approach keeps the retail centre resilient and operational, benefiting both the business and the community that relies on it.

ENVIRONMENTAL PROTECTION MEASURES

Protecting the environment is a core part of this emergency plan. Beyond preventing harm to people, the protocols aim to prevent pollution of soil, water, and air during emergencies, and to mitigate any environmental impacts of incidents. Key measures include:

- **Spill Prevention and Response:** As detailed in Section 4.7, a Spill Response Plan is in place for any hazardous release. This plan clearly states how to stop the source of a spill, contain it, clean it up, dispose of waste, and train personnel on these steps. All maintenance staff and relevant tenant employees (e.g. those handling cleaning chemicals or fuels) receive annual training in spill response. Spill kits (absorbent pads, neutralizers, gloves, etc.) are strategically located and regularly inventoried. During an incident, the EHS Officer or Security ensures that spilled substances are kept out of storm

drains to avoid water pollution, and uses floor drains only if they lead to containment tanks or interceptors.

- **Firefighting Runoff Management:** Fire incidents can create polluted runoff (water mixed with debris, burned material, or firefighting foam). The building has measures to contain this: the parking area and loading dock drains are equipped with an oil-water separator and shut-off valve that can be closed in an emergency to hold contaminated water on-site for proper disposal. After a fire, the facility team will work with environmental contractors to test and treat any water before releasing it. This prevents contaminated water from reaching the municipal stormwater system or nearby soil.
- **Hazardous Materials Handling:** All potentially hazardous materials used on site (cleaners, paint, etc.) are stored in designated cabinets. By following proper storage and segregation (incompatible chemicals kept apart), we reduce the chance of an accidental reaction or leak. Regular inspections are done to check for container integrity, proper labeling, and expiration of chemicals. This diligence helps prevent environmental incidents from occurring in the first place.
- **Air Quality Control:** For the building's HVAC, we use high-quality filters that can capture smoke particles, and we have the option to switch to full recirculation mode temporarily. If an incident on-site causes smoke or fumes (e.g. a fire or a refrigerant leak from HVAC), we evacuate and let emergency services handle it, but afterward we ensure ventilation of the space and air testing if needed before re-occupancy.
- **Waste Management After Incidents:** Any debris or waste generated by an emergency (fire debris, water-damaged materials, contaminated absorbents from a spill, etc.) is handled as per environmental regulations. We will contract licensed hazardous waste haulers for materials like chemical-soaked pads (if any is disturbed by structural damage). Non-hazardous debris is sorted and recycled where possible (metal, glass, etc. from building damage). By managing waste properly, we avoid secondary environmental impacts during the recovery phase.
- **Pollution Incident Communication:** In the event a spill or emission does occur that could impact the external environment, we will immediately notify the appropriate authorities as required by law. In Hungary, this means informing the National Inspectorate for Environment (or via the general emergency line 112 which coordinates with environmental response teams). Quick notification helps ensure wider environmental protection measures (like river pollution control) can be taken by authorities if needed. We also would notify neighboring properties if they might be affected (for example, if a fuel spill could seep under a fence).
- **Environmental Training & Culture:** Beyond physical measures, we foster a culture of environmental responsibility. Staff are trained not just in *how* to respond to spills, but in preventing them: e.g. careful handling hazardous materials, not storing large volumes of hazardous substances on site if not necessary, etc. We also include environmental criteria in our procurement – preferring less toxic products (paint, cleaning agents) to reduce impact if a spill happens.

By integrating these environmental protections into the emergency plan, the retail centre demonstrates leadership in sustainability and resilience. These measures show that the asset "aims to protect the environment in addition to people and property". More importantly, we fulfill our duty of care to the local ecosystem, ensuring that an accident at our site does not become an environmental disaster.

COMMUNICATION STRATEGY WITH TENANTS AND STAKEHOLDERS

Effective communication is vital before, during, and after emergencies to ensure everyone's safety and a coordinated response. This strategy outlines how we communicate with building users (tenants, employees, customers) and external stakeholders (emergency services, community, media, etc.):

- **Emergency Contact Directory:** An up-to-date list of key contacts is maintained (Appendix A), including all tenant emergency coordinators, the General Manager, Chief Engineer, security desk, local police and fire station contacts. In an emergency, this directory guides who must be contacted immediately. The list is also available in the Building User Guide.
- **Alarm Systems:** The primary immediate communication of an emergency on-site is through alarm systems (fire alarm sirens and flashing lights for fire, public address [PA] announcements for other types of emergencies). Fire alarms are loud and clear building-wide to prompt evacuation. The PA system allows specific voice instructions; scripts for different scenarios are pre-written.
- **On-site Announcements:** During an emergency, clear and calm communication is crucial. Security or management will make concise announcements: "Attention: [Describe situation] – [Immediate instructions]." For instance, *"Attention: There is a chemical spill on the ground floor near Shop X. Please avoid the area and evacuate via Exit B if you are in that vicinity. Others, please remain in your stores until further notice."* Regular updates should be given at reasonable intervals (even if just "we're managing the situation, please stand by") to reduce panic and uncertainty.
- **Language and Clarity:** All emergency announcements will be made in Hungarian (the local language) as the first language to ensure every staff member and local shopper understands. When possible, a brief English announcement can follow (some international auditors or tourists might be present, and the anchor tenant may have foreign managers). The phrasing avoids technical jargon and is actionable (telling people exactly what to do).
- **External Communications:** The General Manager (or a designated Public Information Officer if assigned) will handle communication with outside stakeholders:
    - *Emergency Services:* As noted, when calling 112, provide clear, factual information (who, what, where, when, what is needed). Maintain an open line of communication – e.g., if conditions change before responders arrive, update them. Once responders are on scene, communication lines exist between them and our coordinator for any support they need.

- *Utility Companies:* If the emergency involves utility disruption (power, water, gas), contact the provider's emergency line promptly. For example, in a gas leak, notify the gas company so they can shut off supply externally. Keep them informed of what's going on so they can prioritize response.
- *Tenants & Employees (Post-incident):* After an emergency, send a debrief email to all tenants summarizing what happened, actions taken, and any expected impacts (e.g. "The west wing will remain closed for 2 days for repairs"). This transparency builds trust and ensures everyone knows what to do next (like when they can return). For employees, also provide information on support available if needed (like counseling after a traumatic event).
- *Customers/Public:* The centre's public relations policy is to have a **single spokesperson**. Factual press statement focusing on confirmed information is prepared post emergency (e.g. "Today at 3 PM a small fire broke out in one unit of the centre. It was quickly contained by the sprinkler system and evacuated safely; no injuries occurred. The centre will reopen tomorrow after cleanup."). Speculation or admission of liability in initial statements should be avoided. If the incident affects the broader community (like a major chemical spill with off-site effects), we coordinate with local authorities on messaging to ensure consistency.

- **Drills and Communication Testing:** Part of training (Section 8) includes testing the communication systems. Every drill, announcements are practiced. We collect feedback, for example, if some tenants didn't hear an announcement then improve the system.
- **Documentation:** All communications during an incident are documented when possible. Security maintains an incident log including times of announcements, who was contacted, etc. Post-incident, this log is reviewed to evaluate if communication was timely and effective or if any confusion arose that needs clarification in the plan.

By having a robust communication strategy, we ensure that *no one is left in the dark* during an emergency. Timely warnings and instructions can save lives, prevent panic, and enable a coordinated effort between the multi-tenant occupants and responders. It also shows auditors and stakeholders that the plan is not just written on paper but is a living protocol actively conveyed to all involved.

TRAINING AND AWARENESS

To make the Emergency Plan effective, all relevant personnel must be familiar with it and proficient in their roles. A training and awareness program is established, as ongoing education is key to a quick, confident response. The training regimen includes:

- **Initial Training (Onboarding):** When new employees (building staff or tenant staff) start, they receive an orientation on emergency procedures. This includes reviewing evacuation routes, alarm signals, assembly points, and the role of that individual (e.g. if they are expected to assist customers or if they have a specific duties). For tenant organizations, the building management provides an "Emergency Plan Briefing" document summarizing key actions for common scenarios.

- **Role-Specific Training:** Persons assigned to specific emergency roles (Section 3) get detailed training. For example:
    - **Floor Wardens/Marshals**: Training on how to direct people to exits, use of basic fire extinguisher, checking all rooms, methods to assist persons with disabilities, and communication of status to security.
    - **Security Officers**: Frequent drills on alarm response, crowd management, first aid, and coordination with police/fire. They also train in technical areas like operating the fire alarm panel, PA system, and reading fire control diagrams.
    - **Maintenance**: Hands-on practice with spill kits, understanding chemical labels, and the procedure to safely clean different types of spills.
    - **Tenant Emergency Coordinators**: Yearly briefing from building management on any plan updates, and a table-top exercise where a scenario is walked through (e.g. “what if a fire happens in your store – what do you do?”) to keep their readiness sharp. They in turn drill their staff on tenant-internal procedures (like retrieving first aid kit, securing cash drawers before evacuating, etc.).
- **Emergency Drills**: Evacuation drills are conducted at least twice a year. One drill focuses on fire (full building evacuation to assembly point, testing alarms and staff actions). Another drill or exercise focuses on a different scenario – e.g. a shelter-in-place drill for a storm or a lockdown drill for a security threat. These drills involve few tenants (we schedule at a time that’s least disruptive, often before opening or just after closing, to practice with staff without panicking customers). The anchor tenant’s participation is crucial given their size; we coordinate timing with them. After each drill, a debrief meeting is held to discuss what went well and what needs improvement (e.g. did everyone hear the alarm? Did evacuation meet our target time? Were all exits used properly?).
- **Awareness Campaigns:** We periodically run awareness campaigns to keep emergency preparedness in mind. For example, at the start of summer, a memo is circulated “Heatwave Preparedness: Know the signs of heat exhaustion” and outline our centre’s heatwave measures (refresher from Section 4.3). Before winter, remind about snow procedures and proper use of space heaters.
- **Documentation and Records:** All training sessions and drills are documented with date, participants, and topics covered. This not only helps track compliance but also ensures every staff member has attended mandatory sessions. If someone misses a drill (e.g. night shift staff), we provide a make-up briefing for them.
- **Continuous Improvement:** Training events often reveal gaps or new ideas. We actively update training content and the plan itself based on feedback. For instance, if a drill shows confusion about a secondary exit route, we will improve signage and emphasize it in the next training. If a tenant identifies a risk not covered (say a new machine in their store with lithium batteries that poses fire risk), we incorporate that into scenarios.

- **Competent Instructors:** Where possible, we engage experts for training and require suitable qualification. This ensures our training material stays aligned with best practices and legal requirements.
- **Tenant Engagement:** We require the anchor tenant to also train their staff in line with this plan. Many large retailers have corporate safety training – we coordinate to ensure it doesn't conflict with our procedures. In lease agreements or tenant manuals, it is stated that compliance with building emergency drills and training is mandatory. Building management offers support to smaller tenants who may not have their own resources, to help train their few employees.

Through rigorous training and an ingrained culture of preparedness, the facility team and all tenants will "know what to do when an emergency occurs and react appropriately". This competence reduces panic, speeds up response, and ultimately can save lives and property.

PLAN MAINTENANCE, UPDATES, AND REVIEW CYCLE

An emergency plan must remain current and effective as conditions change. We have established a systematic **review and update cycle** to keep this document (and associated procedures) up-to-date. The plan maintenance policy is as follows:

- **Annual Review:** The Emergency Plan is reviewed in full **at least once per year** by the Emergency Coordinator (General Manager) in collaboration with the HSE Officer and tenant representatives. This annual review checks for any changes in building layout, occupancy (new tenants or changed tenant activities), new equipment or hazards, and lessons learned from any incidents or drills in the past year. Even if no major changes, an annual refresher ensures the plan remains fresh and known to stakeholders.
- **Post-Incident Review:** After any significant emergency or drill, a *debrief meeting* is held and any identified shortcomings or improvement areas in the plan are noted. For real incidents, we conduct an after-action review: what went well, what didn't, and why. The plan is then updated accordingly. For example, if a storm revealed that communication to customers was lacking, we might add a protocol to use a megaphone on-site. If a fire incident showed a particular exit was obstructed, we improve maintenance and update the plan to emphasize keeping it clear.
- **Changes in Risk Profile:** Every 5 years (or sooner if climate science advances), we update our climate-related risk assessment with the help of a competent expert.
- **Stakeholder Input:** Tenants are invited to provide input during reviews – perhaps the anchor tenant updated their internal emergency plan or the insurance inspector made a recommendation. We value this input and include relevant changes to maintain alignment and compliance.
- **Documentation of Updates:** Every revision of the plan is documented with a new version number and date. A summary of changes is listed at the front of the plan for transparency. When changes are made, all stakeholders (tenant managers, security, etc.) are notified of

the new version and given a briefing on what's different. Outdated copies (physical or digital) are discarded to avoid confusion.

- **Accessibility:** The current Emergency Plan is easily accessible to all building users: a digital copy is available on the building's tenant portal, and a printed copy resides in the property management office. Key extracts (like evacuation maps and emergency contact lists) are posted on notice boards in staff areas.
- **Audits and Certification:** As this plan is part of our BREEAM In-Use criteria, we subject it to audit by BREEAM assessors. Any feedback from such audits (or from fire authorities' inspections) is taken into account. Additionally, our insurance provider periodically reviews our emergency plan – their recommendations (often aligned with NFPA/industry standards) are incorporated as part of maintenance.
- **Timeframe and Strategic Alignment:** The plan explicitly covers a **10-year horizon** (2025–2035) for emergency preparedness strategy, which aligns with our asset management plan. However, the review cycle ensures it's a rolling horizon – each year we extend the outlook as needed.
- **Endorsement:** The Emergency Plan is officially approved by senior management (Asset owner or property company). After each major update, signatures are obtained to demonstrate everyone's commitment. Copies of the endorsed plan can be shown to **international auditors** to verify that the plan is not only written but actively maintained and backed by management.

In essence, this Emergency Plan is a living document. Regular review and updates guarantee that it remains effective amid change. This diligent maintenance meets and exceeds the requirements of standards and regulations, which often mandate at least annual reviews, and gives confidence to all stakeholders that the retail centre is prepared for whatever emergencies the future may hold.

APPENDIXES

Appendix A – Emergency Contactlist

Appendix B – Emergeny Report

Appendix C – Emergency Brief (Tenant)

References:

1. **Risk- and Climate Change Assessment References:**
    - RSL01 – Flood Risk Assessment of Shopland Miskolc
    - RSL03 – ASWL standards by BREEAM
    - RSL09 – Fire Risk Audit of Shopland Miskolc
    - Natér (Nemzeti Alkalmazkodási Térinformatikai Rendszer) https://map.hugeo.hu/nater/

- Aqueduct Water Risk Atlas 4.0
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2. **Incorporated Emergency Plans**
   - Shopland Miskolc Avas - Fire Emergency Response - Dome Zrt.
3. **Climate Models and Projections** (trought Natér and Aqueduct)**:**
   - ALADIN-Climate (Hungarian Meteorological Service - OMSZ)
     https://www.met.hu/en/omsz/tevekenysegek/klimamodellezes/
   - RCA4/EC-EARTH (Rossby Centre regional atmospheric climate model)
     https://cordex.org/data-access/regional-data-portals/
   - RCA4/CNRM-CM5 (Rossby Centre regional atmospheric climate model)
     https://cordex.org/data-access/regional-data-portals/
   - Representative Concentration Pathways (RCP) 8.5 (IPCC)
     https://www.ipcc.ch/report/ar5/syr/
4. **Hungarian Fire Safety and Legal Regulations:**
   - 1996. évi XXXI. törvény (Hungarian Fire Protection Law)
     https://net.jogtar.hu/jogszabaly?docid=99600031.TV
   - 101/2023. (XII.29.) BM rendelet (Fire Safety Regulation by Ministry of Interior)
     https://magyarkozlony.hu/
5. **BREEAM Related Documents and Technical Manuals:**
   - BREEAM In-Use Technical Manual (RSL Criteria)
     https://bregroup.com/products/breeam/breeam-in-use/
   - GRESB and BREEAM alignment documents (for RSL credits)
     https://gresb.com/resources/
6. **Additional Standards and Best Practices:**
   - NFPA 1600: Standard on Continuity, Emergency, and Crisis Management
     https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1600
   - ISO 22301:2019 Security and Resilience – Business Continuity Management Systems
     https://www.iso.org/standard/75106.htm