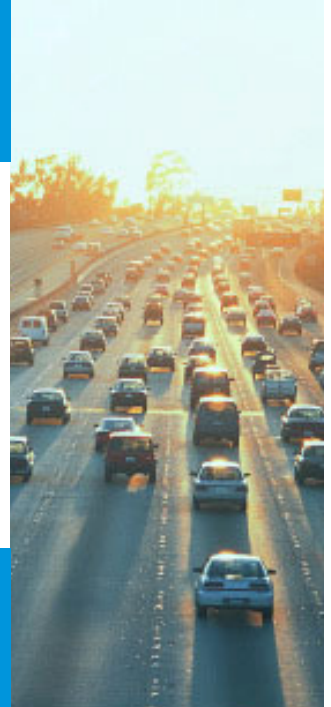
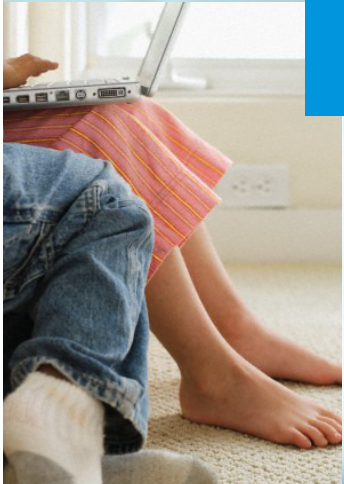
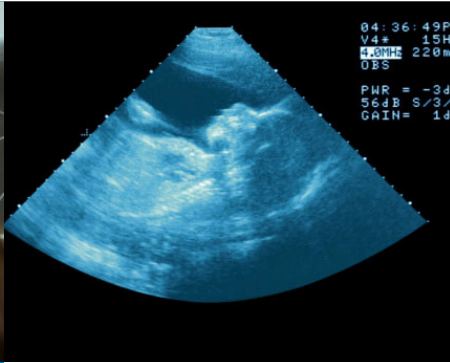




Environmental Insurance

Magdalena Szczepłocka

Budapest, February 2015



Bring on tomorrow

AIG – Europe Key Facts

Global key facts

- ✓ Wholly owned subsidiary in 90 countries and jurisdictions
- ✓ Diverse business
- ✓ Scale and expertise in Worldwide markets

A leading Insurer in Europe

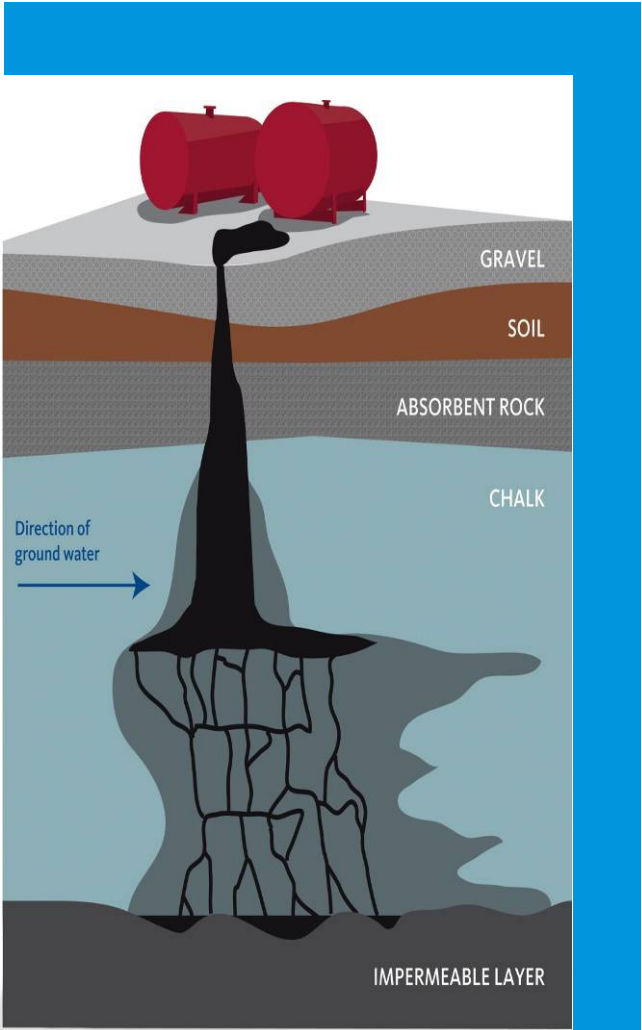
- ✓ Operating in over 26 countries
- ✓ With over 5000 employees
- ✓ AIG UK Limited – FSA regulated
- ✓ Drawing on nearly 60 years experience
- ✓ European market leader in Environmental products offerings





Nature of environmental exposures

Gradual release



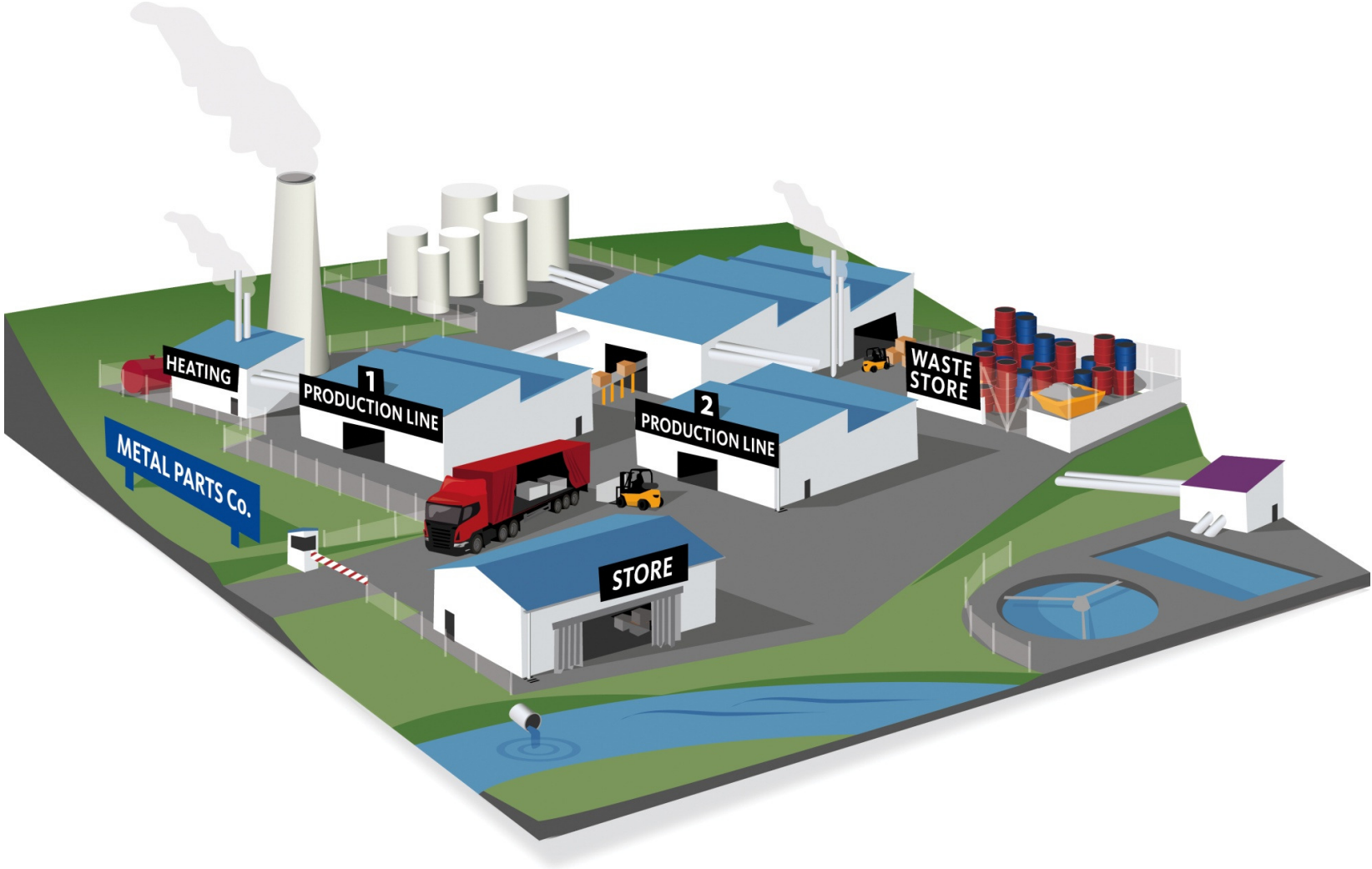
Nature of environmental exposures

Környezeti kockázatok

- ✓ Leaking Underground Tanks **Szivárgó földalatti tartályok**
- ✓ Leaks from Above Ground Tanks and Piping **Föld feletti tartályok és vezetékek szivárgása**
- ✓ Repeated Spills in Process Areas, Packaging Areas, Loading Areas, Etc.
Ismétlődő kiömlések a feldolgozási, csomagolási, rakodási, stb. területeken
- ✓ Storm Water Run-Off from Material Storage and Waste Storage Areas
Csurgalékvíz a az anyag- és hulladéktárolási területekről
- ✓ Poor Maintenance Practices
Nem megfelelő karbantartás
- ✓ Consequential to sudden and accidental
Véletlen balesetszerű károk következtében



Nature of environmental exposures





Environmental Liability Directive & local implementation

ELD alapjai

2004/35/EK EU irányelv

- ✓ Az ELD a környezeti károk következményeire fókuszál, felismerte a meglévő törvények bővítésének szükségességét.
- ✓ A hatóságoknak **kötelessége** cselekedni.
- ✓ Fókuszban a **környezeti károk** (természet, víz, talaj, élővilág)
- ✓ **Nem a „hagyományos” károkkal foglalkozik** (személyi sérülés, dologi kár, pénzügyi veszteség)
- ✓ Cél a **környezet helyreállítása, és nem** harmadik személyek kártalanítása



ELD alapjai

- ✓ Bevezetés – 2007. április 30.
- ✓ Minden környezeti esetet jelenteni kell – ennek elmulasztása bűncselekmény.
- ✓ Szigorú felelősség – néhány iparágban a hibázás vagy gondatlanság nem előfeltétele a cselekedetek végrehajtásának
- ✓ Károk mértékének megnövekedése
- ✓ Nagyobb helyreállítás

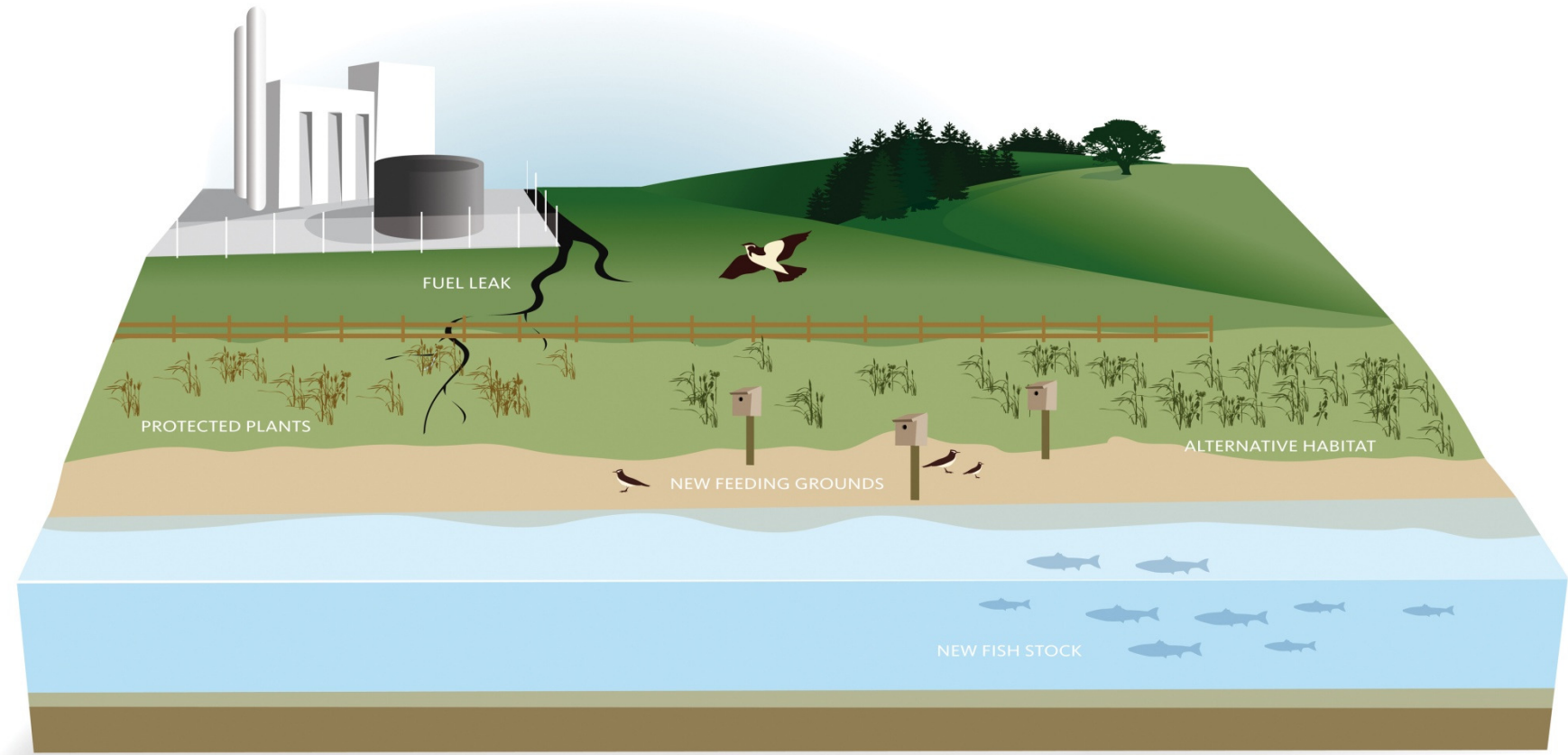


ELD alapok



- > “**Elsődleges**” helyreállítás: olyan helyreállítási intézkedések, melyek visszaállítják a károsodott környezeti elemet annak eredeti állapotába.
- > “**Kiegészítő**” helyreállítás: olyan kiegészítő intézkedések, melyeket akkor tesznek, ha az „elsődleges” helyreállítás nem elégséges az eredeti állapotba történő visszaállításhoz.
- > “**Kompenzációs**” helyreállítás: olyan intézkedések, melyek a kár bekövetkezése és a helyreállítási intézkedések hatásának megnyilvánulása közötti veszteségek kompenzálására irányulnak.

ELD alapok



1995. évi LIII. tv. a környezet védelmének általános szabályairól



9.§: „A környezethasználó....felelősséggel tartozik
tevékenységének a környezetre gyakorolt hatásaiért.”

101.§ (1): „A környezethasználó az e törvényben meghatározott
és más jogszabályokban szabályozott módon büntetőjogi,
polgári jogi és közigazgatási jogi felelősséggel tartozik
tevékenységének a környezetre gyakorolt hatásaiért.”

2012. évi CLXXXV. törvény a hulladékról

- Legfőbb cél: hulladékképződés minimalizálásának biztosítása
- Fogalmak pontosítása

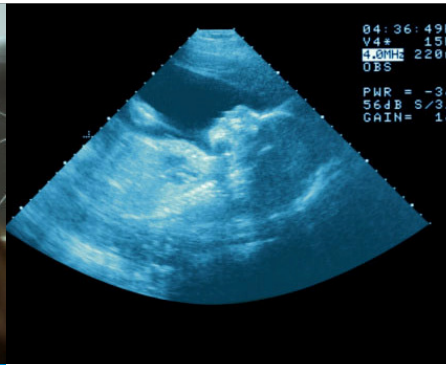
70.§: A tevékenységével okozható, előre nem látható környezeti károk felszámolását lehetővé tevő finanszírozás biztosítása érdekében **környezetvédelmi biztosítást köt** az a kormányrendeletben meghatározott gazdálkodó szervezet,

- a) amelynek tevékenysége során kormányrendeletben meghatározott mennyiségű hulladék képződik,
- b) amely e törvény szerint hulladékgazdálkodási engedélyhez vagy nyilvántartásba vételhez kötött tevékenységet végez, valamint az,
- c) amely az 1013/2006/EK európai parlamenti és tanácsi rendeletben meghatározott célból Magyarország területére hulladékot behoz, kivisz vagy átszállít.

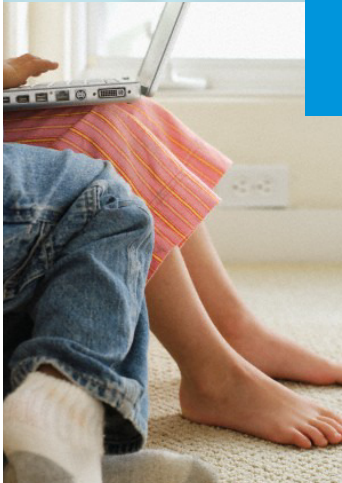
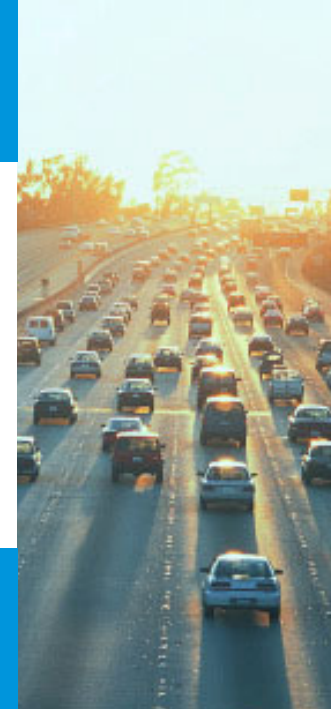
Környezetvédelmi biztosítást kell kötniük:



1. Hulladék birtokosától hulladékot vesznek át, szállítanak el, tárolnak, kezelnek
2. Az 1013/2006/EK rendeletben meghatározott célból Magyarország területére hulladékot hoznak, visznek ki vagy szállítanak át
3. Tevékenységük során a hulladékkal kapcsolatos nyilvántartási és adatszolgáltatási kötelezettségről szóló 440/2012 (XII.29.) korm.rendeletben meghatározott mennyiségű hulladék keletkezik:
 - >100 kg veszélyes hulladék
 - >2000 kg nem veszélyes hulladék
 - >5000 kg építési-bontási hulladék



Néhány káresemény bemutatása



Cipermetrin a Dunában

- ✓ 1998 május - A Chinoin (Agro-Chemie) nagytétényi telepén 120 liternyi CHIMNIX 5EX nevű anyag (rovarölő permetezőszer – halakra kifejezetten veszélyes) került a padlóra (szivattyú-meghibásodás miatt).
- ✓ A kifolyt anyagot a munkások vízzel lemosták, de a szennyezett vizet a műhely előtti csapadékcsatornába szivattyúzták.
- ✓ Az Agro Chemie dolgozói nem értesítették a hatóságokat.
- ✓ A környékbeli horgászok másnap halpusztulást jelentettek.
- ✓ Százhalombatta és Ercsi két napig vezetékes víz nélkül maradt, a csepeli parti szűrésű kútsor is veszélybe került.
- ✓ A szennyezés vonatkozó költségei összesen mintegy 85 millió Forintot tettek ki.



Vinaszömlés a Kapos folyóba

- ✓ 2013. szeptember 24. – Kaposvári Cukorgyár
- ✓ 5000 m³–es tartály a korábbi hegesztés mentén megrepedt – a benne található 4455 t vinasz (= cukortalanított melasz, a cukorgyártás mellékterméke; nem tartalmaz toxikus anyagot; magas fehérjetartalma miatt takarmányozásra használják) teljes egészében kifolyt
- ✓ A jellegzetes szagú sötétbarna folyadék több száz m² –en és fél méter magasan elöltötte a tartály környezetét.
- ✓ Azonnali hatósági beavatkozás (földszánc, szivattyúzás, felhasználás a biogáz üzemben)
- ✓ Kb. 15 t vinasz került a Kapos folyóba – halászati tilalom



Szennyvíz az Ikva -Patakban

- ✓ 2008. február 06. – Magyar Cukor Zrt. petőházi cukorgyár szennyvíztároló tó gátja átszakadt
- ✓ 33.276 m³ szennyezett víz került az Ikva patakba – jelentős szerves szennyezőanyag terhelés
- ✓ Natura 2000 területet érint – fokozott védelem
- ✓ hatósági beavatkozás – 165.600 m³ hígító víz kormányzása a Kardos-érből a Répcén keresztül az Ikvába a halpusztulás megelőzése érdekében
- ✓ Nem történt jelentős környezeti kár
- ✓ Kárelhárítás költsége 2 millió Ft – a petőházi cukorgyárra hárítva



Patyolat

- ✓ 2011
- ✓ Egykori patyolat vállalat Békéscsabán
- ✓ A vegytisztítás során keletkezett hulladék (persár – a klórtartalmú tisztítószer 80%-át desztillációs úton visszanejrték, a maradék 20%-ot kovaföldben itatták fel – ez a persár) nem megfelelően volt tárolva 1985-91 között – beszennyezte a talajt
- ✓ Kárelhárítás költsége 1,5 milliárd Ft
- ✓ A cég jogutód nélkül megszűnt – állami feladat az elhárítás
- ✓ A kármentesítést uniós pályázat segítségével oldják meg



Rákos-patak szennyezése

- ✓ 2015. január 26. – építőipari cég nyomáspróbát végzett egy 14 km-es csővezeték-szakaszon
- ✓ a vizet a Rákos-patakból vették (engedéllyel rendelkeztek), és oda is engedték vissza – rozsdás volt
- ✓ Vízügyi hatósági + katasztrófavédelmi vizsgálat





Claims examples

Crude oil pipeline burst

Sudden & Accidental Pollution

Premises Off Site : Oil & Gas

A rupture occurred on August 7, 2009 from a crude oil transportation pipeline, into an area designated as a natural reserve (Natura 2000), home to several rare species of birds as well as small reptiles and insects in the south of France. A total of 4000 m³ of oil were released. A fatigue crack is believed to be the most likely root cause.

Potential third party claims include pollution to the water supply to neighboring towns, closure of a refinery in Switzerland due to insufficient crude oil volumes, and damage to and interruption of three other pipelines in the area.

Competent authority has been engaged as potential biodiversity damages are assessed. Criminal proceedings have also been filed,

> **Potential Loss : + 20.000.000 €**

- | | | |
|---|--|---|
| Coverage applicable to the above Incident: | <input checked="" type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input type="checkbox"/> Business Interruption |
| <input checked="" type="checkbox"/> Offsite Cleanup Costs | <input checked="" type="checkbox"/> Biodiversity Damage | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Onsite Cleanup Costs | <input checked="" type="checkbox"/> Mitigation Costs | <input checked="" type="checkbox"/> Defense Costs |



Oil seepage from transfer pipeline

Sudden & Accidental Pollution

Premises Off Site : Oil & Gas

In late April 2006, oil was found into a cable telephone manhole situated along a road nearby oil bulk storage facilities. Investigations showed that the pollution gradually developed over time from a faulty joint in a tapping located along our insured's transfer pipeline between the Port of Marseille (France), and the its storage facility.

200 m³ free product leaked overtime, being undetected as the quantity variation between in and out products remained in the acceptable ranges.

Pollution struck third parties locations ; soil and water cleanup occurred, including water table continuous pumping for 6 months. Third parties claims were brought in for damages to their pipelines coatings. regulatory authorities were involved to monitor remediation.

> **Actual Loss : 1.200.000 €**

Coverage applicable to the above Incident:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Offsite Cleanup Costs | <input checked="" type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input type="checkbox"/> Business Interruption |
| <input type="checkbox"/> Onsite Cleanup Costs | <input type="checkbox"/> Biodiversity Damage | <input type="checkbox"/> Transportation |
| | <input type="checkbox"/> Mitigation Costs | <input checked="" type="checkbox"/> Defense Costs |



Oil spill from tomato factory

Sudden & Accidental Pollution

Premises On & Off Site : Food processing

The insured owns and operates a plant that produces derivative tomato products in Portugal.

The plant has various equipment on site including ASTs, boilers, vapor heat exchangers, fuel oil heat exchangers and vapor water heaters.

Under normal operations, clean condensates from the oil and water heat exchangers are collected and discharged into a storm water drainage system which ultimately discharges into a nearby stream and river.

A crack developed in the piping of the fuel oil heat exchanger allowing fuel oil into the condensate, eventually affecting the nearby stream, river and vegetation. Local regulatory authorities were engaged.

> **Potential Loss : 1.000.000 €**

Coverage applicable to the above Incident:

Offsite Cleanup

Onsite Cleanup

Costs



3rd Party Bodily Injury

Biodiversity Damage

Mitigation Costs

Business Interruption

Transportation

Defense Costs



Oil spill from motor test bench

Sudden & Accidental Pollution

Premises On Site : Aeronautics

Our insured runs test bench for engines at his facility in France. He uses kerosene, stored in 3 underground storage tanks (UST) and transfer fuel from UST to the test benches through aerial piping.

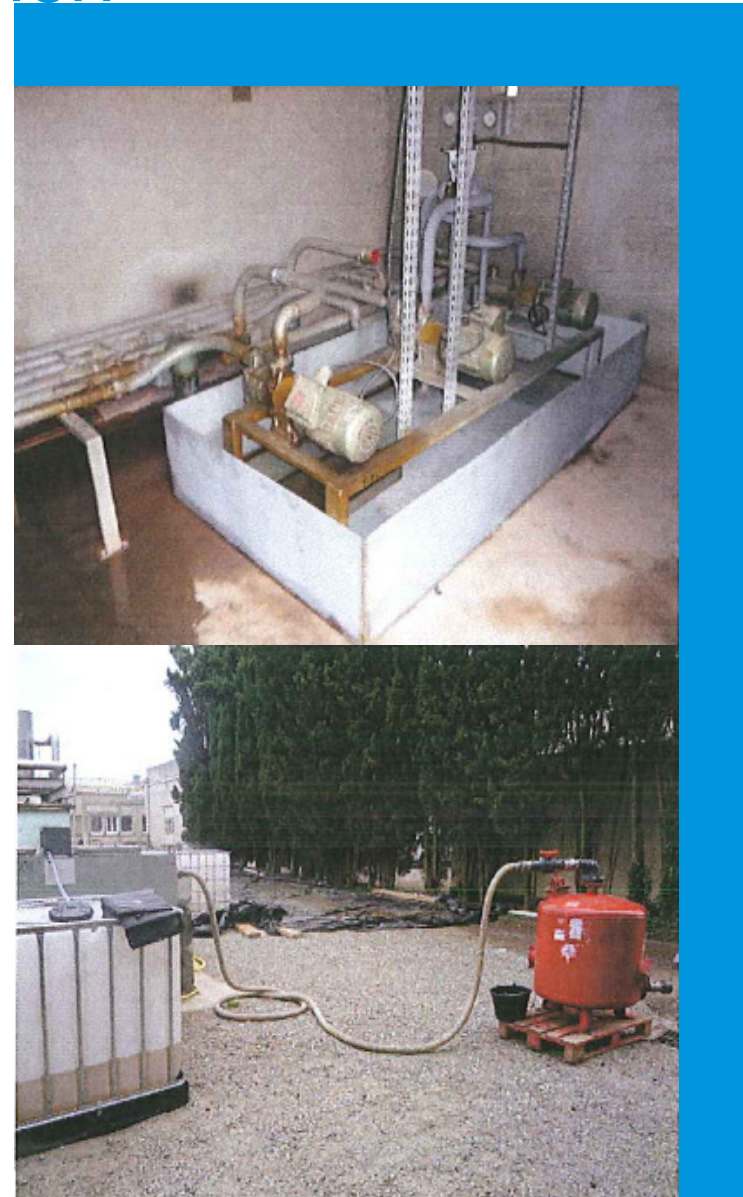
In March 2009 during a fuel transfer, a joint broke open from a pump in an ancillary workshop. Fluid projections were not contained in the secondary containment and kerosene leaked out in a rainstorm water sewer, finding a preferred route to the underground water table through a disaffected dry well.

Emergency intervention conducted to implementation of testing wells, laboratory sampling, and an onsite pumping and charcoal treatment station, to prevent the pollution from extending outside the site's boundaries, all under supervision of consultant.

> **Actual Loss : 350.000 €**

Coverage applicable to the above Incident:

- | | |
|---|--|
| <input type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input type="checkbox"/> Business Interruption |
| <input type="checkbox"/> Offsite Cleanup Costs | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Onsite Cleanup Costs | <input checked="" type="checkbox"/> Mitigation Costs |
| | <input type="checkbox"/> Defense Costs |



Extinction water pollution

Sudden & Accidental Pollution

Premises Off Site : Metal Recycling

The Insured owns and operates a metal recycling facility in southern France that suffered fires on two separate occasions in December 2007 and March 2008.

Samples taken to comply with discharge permit requirements revealed elevated levels of pollutants.

Further investigations showed that the fire water runoff and fire suppression materials affected the wastewater treatment equipment at the Insured's facility.

The regulatory authorities have been engaged as animals and vegetation in a nearby protected swamp were impacted.

> Potential Loss : 500.000 €

Coverage applicable to the above Incident:

- Offsite Cleanup Costs
- Onsite Cleanup Costs



- 3rd Party Bodily Injury or Property Damage
- Biodiversity Damage
- Mitigation Costs
- Business Interruption
- Transportation
- Defense Costs



Oil seepage from service station

Sudden & Accidental Pollution

Premises On Site : Transport & Logistics

The Insured runs a logistics platform in France, including trucks maintenance workshop and an in-house service station

While performing the installation of a gasoline additive system, a contractor discovered oil seepage coming in inside a trench to be used as cables pathway.

Investigation demonstrated that oil pollution extends underneath the 50 m² paved area and further below the workshops. A gradual leak coming from the distribution pump has been found as the root cause. On site soil remediation involving bio-venting process has been assessed.

> Potential Loss : 400.000 €

Coverage applicable to the above Incident:

- | | | |
|---|---|---|
| <input type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input checked="" type="checkbox"/> Business Interruption | |
| <input type="checkbox"/> Offsite Cleanup Costs | <input type="checkbox"/> Biodiversity Damage | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Onsite Cleanup Costs | <input type="checkbox"/> Mitigation Costs | <input type="checkbox"/> Defense Costs |



Toxic dioxine fumes

Sudden & Accidental Pollution

Premises On Site : Paper Mill from fire

On June 18th 2001, by night, a fire occurred in a paper factory in north of France. Five electric transformers containing polychlorinated biphenyls (PCB) were destroyed dispersing 600 kg of dielectric oil. At 500°C, PCB degrades into highly toxic materials: dioxines and furanes

On the fumes pathway over a 2.5 km perimeter around the factory, plants and crops were forbidden to be used, and have been put under monitoring. Hundreds of samples were taken from ashes, construction materials, soils, water, and plants.

96 people (Rescuers, employees, journalists and neighbors) were put under medical control over more than one year by the inter regional epidemiology center.



> Potential Loss : Unknown

Coverage applicable to the above Incident:

- | | |
|--|---|
| <input checked="" type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input type="checkbox"/> Business Interruption |
| <input type="checkbox"/> Offsite Cleanup Costs | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Onsite Cleanup Costs | <input checked="" type="checkbox"/> Defense Costs |
| <input checked="" type="checkbox"/> Biodiversity Damage | |
| <input checked="" type="checkbox"/> Mitigation Costs | |



Oil release from treatment

Contractors : Sewage water treatment

Sudden & Accidental Pollution

The Insured operates a wastewater treatment facility on behalf of a municipality. The treated water is discharged from the plant into a nearby river, which eventually flows into the sea.

The presence of oil was noticed inside the plant, obstructing piping and filters, and on the outflow. A downriver property owner claimed damages as a result of the release.

Investigations revealed that an industrial laundry whose wastewater is treated by the Insured's plant accidentally released heating fuel oil into its sewer damaging our Insured's facility which was unable to treat. Subrogation against the laundry has been made to recover cost of treatment plant cleaning and filter's replacements, and other third party's claims settlements.

> Potential Loss : 500.000 €

Coverage applicable to the above Incident:

- | | |
|---|--|
| <input type="checkbox"/> 3rd Party Bodily Injury or Property Damage | <input type="checkbox"/> Business Interruption |
| <input checked="" type="checkbox"/> Offsite Cleanup Costs | <input type="checkbox"/> Biodiversity Damage |
| <input type="checkbox"/> Onsite Cleanup Costs | <input type="checkbox"/> Mitigation Costs |
| | <input type="checkbox"/> Transportation |
| | <input type="checkbox"/> Defense Costs |



POLAND – damage to the black grouse (2008)

- ✓ On 7 January 2008 non – governmental organization (NGO's) had notified to the competent authority the imminent threat of environmental damage and environmental damage (notification of the environmental damage).
- ✓ The area covered by the investment is located within Sites of Community Importance - Natura 2000 - designated Special Protection Areas of Habitat Natura 2000 Torfowiska Gór Izerskich and Special Protection Areas of Birds Natura 2000 Góry Izerskie.
- ✓ Investment caused the destruction and damage to the habitat of the black grouse and their decrease in the area around the investment and worsening possibility of reproduction of the species.
- ✓ On 10 July 2012 Regional Director for Environmental Protection in Wrocław issued a decision imposing to investor an obligation to take preventive and remedial measures.
- ✓ **Authority identifies in decision a number of preventive and remedial measures:**
 - *restriction of decrease of black grouse due to reconstruct local population individuals from the breeding;*
 - *the reduction of predators (foxes, raccoon dog);*
 - *security of refuge of black grouse;*
 - *the protection of individual components of the environment.*



POLAND – damage to swallow's nests (2009)

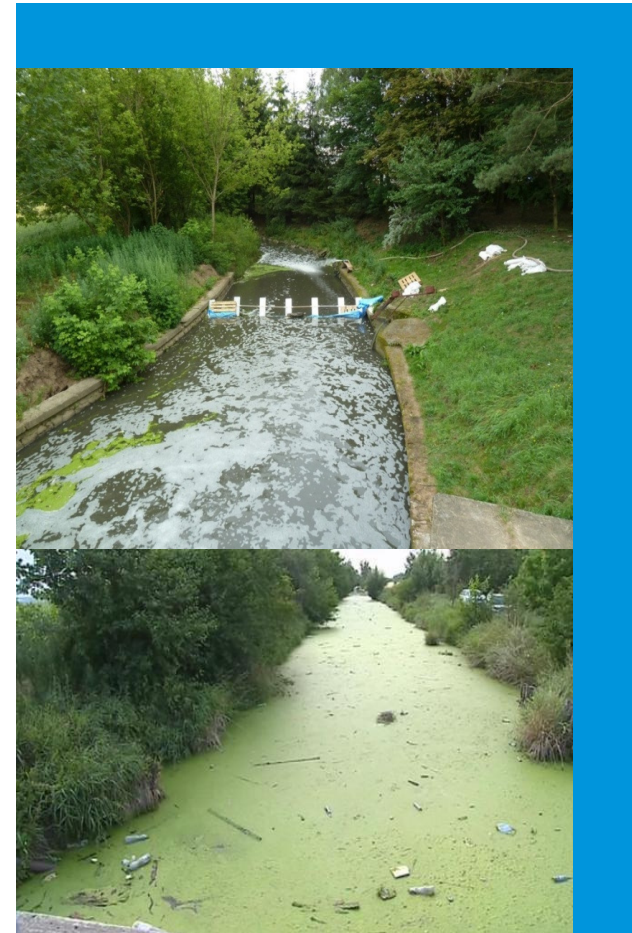
- ✓ Environmental damage is the result of the renovation work of the bridge „Cłowy” in Szczecin. Nests with baby birds were dropped into the water.
- ✓ On 15 July 2009 NGO's had notified to the competent authority the environmental damage (notification of the environmental damage).
- ✓ In connection with the renovation of the bridge investor destroyed 320 swallow's nests. Works conducted by the investor had significant negative impact on the appropriate conservation status of these species and their habitats.
- ✓ **Entity using the environment was an investor (investor supervised building works) and building company/ contractor**
- ✓ **On 17 February 2012 the authority issued a decision imposing to the investor and contractor obligation to undertake remedial measures involving suspension an artificial nests and situation rugged plaster on the elements of the bridge. It's the next decision in that case because administrative proceedings takes from 2009 (appeal procedure).**
- ✓ **On 6 march 2012 investor appeals against a decision competent authority. As a result of the court proceedings complaint was dismissed.**



Source: <http://www.eldimplement.biois.com>

2012: Ecological catastrophe on Blata River, Czech Republic

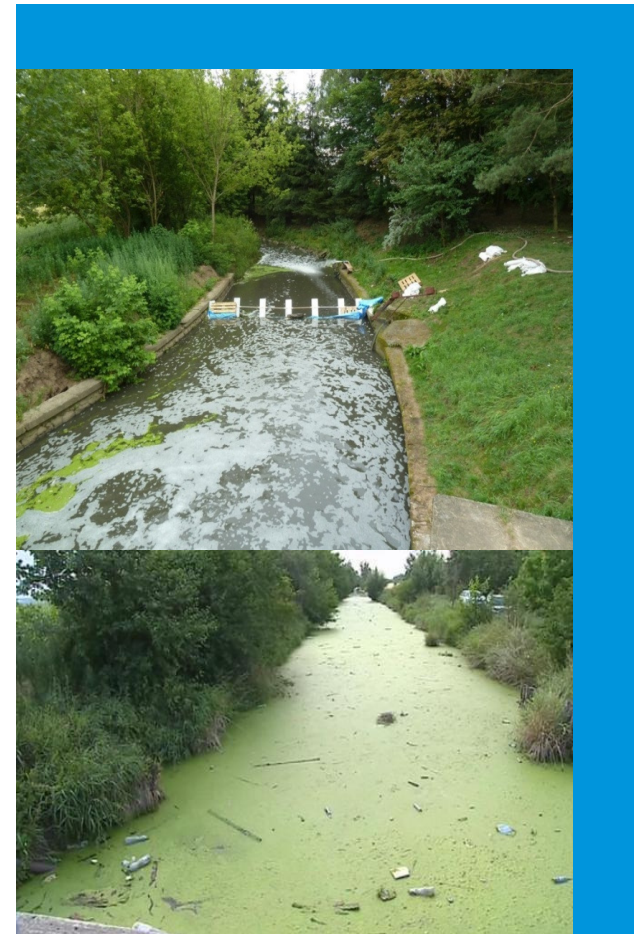
- ✓ **7 July 2012** a rupture happened in underground storage tanks containing manure in one of agricultural Cooperatives. The leaking substance flew into the sewage system and finally reached Balta River
- ✓ **400 m³** of the substance leaked out and, as a consequence, polluted **40 km** of the river.
- ✓ The bottom of the concrete storage tank had been melted because of the high outside temperatures. 8 fish species have been killed as a result of the pollution.
- ✓ Recultivation works including microorganisms injections will last for 3 years, the minimum.
- ✓ Probably the river remediation process will be finalized within **10 years**.



2012: Ecological catastrophe on Blata River, Czech Republic

The decision of the Czech Environmental Inspectorate included:

- ✓ Preventive actions
- ✓ Long-term remediation works (including regular water sampling, water pollution removal, environmental monitoring during the whole period of remediation– **10 years**)





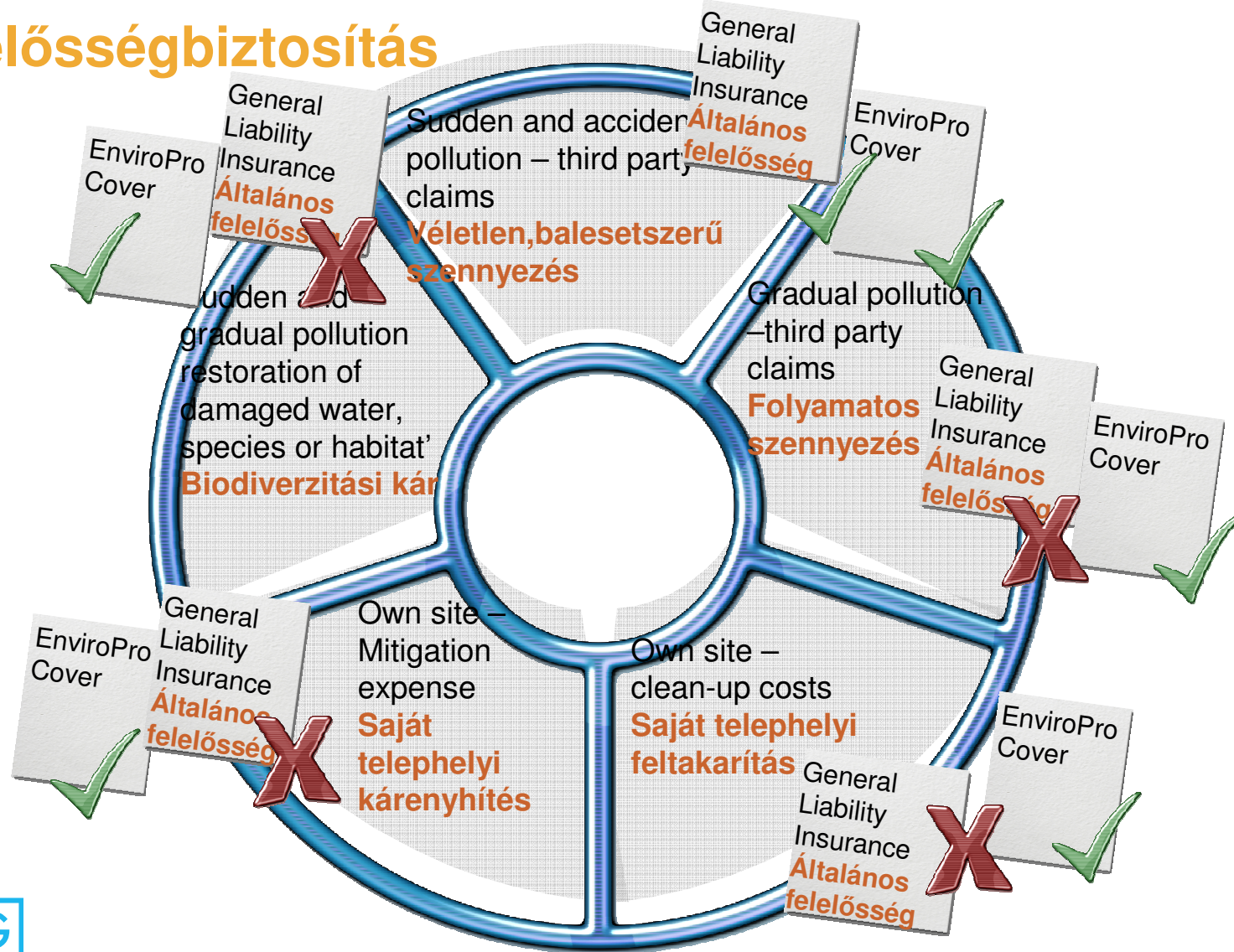
What is Environmental Liability Insurance?

Nature of environmental exposures



What is Environmental Liability Insurance?

EIL vs. Általános felelősségbiztosítás



What is Environmental Liability Insurance?



- ✓ Environmental Damage mitigation expense / **Kárenyhítési költségek**
- ✓ “non-pollution” related Environmental damages / **szennyezéssel nem járó környezeti károk**
- ✓ Transportation related losses / **Szállítással kapcsolatos károk**
- ✓ 1st party Business interruption / **saját üzemszünet károk**
- ✓ Pre-Existing Conditions (unknown) / **meglévő, de nem ismert károk**
- ✓ Non-owned disposal site liability / **nem saját telephely fedezete**

Sales themes for EIL first time buyers

Eladási érvek



✓ GAPS IN THE GENERAL LIABILITY COVERAGE

Különbségek az általános felelősséghez képest

- ✓ Sudden and Accidental vs Gradual pollution **véletlen, balesetszerű vs. folyamatos**
- ✓ Own site clean-up **saját feltakarítás**
- ✓ Historical Pollution **régi szennyezés**
- ✓ INCREASE IN ENVIRONMENTAL EXPOSURES
A környezeti kitettség egyre nő
- ✓ BUDERN OF PROOF
- ✓ REPUTATIONAL DAMAGE **jó hírnév sérül**

✓ TECHNICAL AND LEGAL EXPERTS **technikai és jogi szakértelem**

✓ LONG-TERM REMEDIATION **hosszú távú helyreállítás**

✓ EMPLOYEES CAN BE HELD PERSONALLY LIABLE **a dolgozók személy szerint is felelősségre vonhatók**

✓ LOSSES CAUSED BY EMERGENCY WORKS (ie. firefighters) **sürgősségi munkák kárai**

✓ STRICT LIABILITY **objektív felelősség**

✓ ENVIRONMENTAL DAMAGE EVEN IF WITHOUT POLLUTION **szennyezés nélküli környezeti károk**



Target Customers - Célcsoportok

Our flexibility allows us to underwrite a wide range of business sectors, in particular:
Manufacturers - from heavy industry and chemical companies to food and beverage manufacturers

Gyártó cégek az ipar számos területéről

Power and Utility **Erőművek**

Waste management and disposal facilities

Hulladékkezelők, lerakók

Construction projects and blanket cover for companies **Építőipari projektek**

Bulk storage **Ömlesztett áruk**

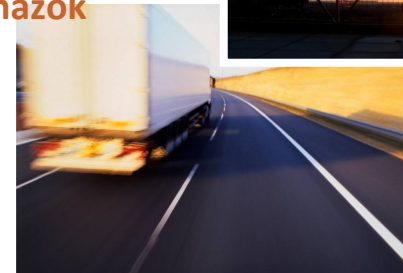
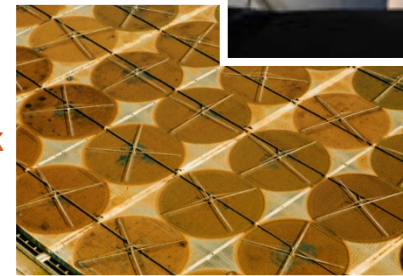
Retail and Warehouses **Raktárak**

Haulage and Logistic **Fuvarozás és logisztika**

Property owners and developers including their tenants **Ingtatlanberuházók**

Environmental Professional Service firms **Környezetvédelmi cégek**

Multinationals **Multinacionális cégek**



PIER Europe – AIG’s unmatched pollution incident and environmental response network delivering reliable and specialised support

PIER Europe Network – accessible for AIG Policyholders exclusively.

- PIER Europe includes specialists in:
 - ✓ Environmental spill response and clean-up
 - ✓ Disaster recovery and restoration
 - ✓ Environmental and ecological consulting
 - ✓ Waste management & disposal
 - ✓ Investigative services including cause and origin.
- Accessible in 32 countries and with operators available 24/7/365 providing support in over 40 languages, the PIER Europe network ensures timely, reliable and comprehensive support for our Environmental policyholders.
- PIER Europe can provide access to professional communication support to help manage the public impact of the incident and minimise reputational damage.
- PIER Europe can aid the dispatch of professional responders and coordinate a comprehensive response – from major and catastrophic to minor pollution and environmental incidents.





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