



## **Integrated health, safety and environmental management**

### *Risk and redevelopment*

**Narrator:** Pittsburgh, Pennsylvania.

Once America's greatest steel producing city.

**Narrator:** For the past twenty five years, Joel Tarr has been cataloguing the changing face of it's industrial landscape.

**Joel Sync:** Here we have a picture of Pittsburgh in 1949, before the Pittsburgh renaissance that redesigned the downtown area and also before the steel industry had collapsed. At this time the downtown area was still occupied by old railroad yards and warehouses and other kinds of industrial use.

In addition the banks of the rivers, particularly the Monongahela River, were lined with integrated steel mills, and as the words go in the Pete Seeger song 'Smoky Old Town', the river was solid iron from Mackeesport down.

**Joel:** Fifty years ago, Pittsburgh was a very contaminated place.

The air was contaminated with smoke, the rivers were filled with industrial waste and human waste and also the land was contaminated.

Yet to a large extent many people were prepared to make the trade-off between jobs and good jobs and a relatively polluted environment, ...the smoke for instance and the noise close to the mills. They didn't necessarily like it but it was a trade-off they were prepared to make.

Today of course, the air is much cleaner, the rivers are cleaner, the slag is being removed or shaped and developed, and people's tolerance for risk has actually gone down.

They are sensitive, and they know about various kinds of risk that they have to incur.

So that we've become a relatively more risk conscious society. And a liability oriented society that's prepared to sue when exposed to perceived risk of some kind.

**Narrator:** The legacy of risk from old industries has been a major constraint on the redevelopment of Pittsburgh's many brownfield sites.

Just half a mile from downtown Pittsburgh, what was known as Herr's Island is now a highly desirable development called Washington's Landing.

**Joel:** It was at one point an agricultural island in the nineteenth century, but in the late nineteenth century it became heavily used for industrial purposes.

It was a major stopping point for cattle being shipped from Chicago to New York, and there were abattoirs here, and there were other facilities for housing cattle and feeding them. There also were other industrial uses on the island, a junk yard, and there was also a major burial ground for not only the carcasses of the animals that died here but also for the zoo, the Pittsburgh Zoo. And so for instance when they began to clean up this island, they discovered elephant bones.

**Narrator:** The heavy contamination of the site was for many years a barrier to redevelopment.

**Baruch:** One thing that happened here that was critical was the we had a change in our legislation which made it possible to clean up sites to standards that were appropriate to the use that they were going to be used. So if it's not gonna be a playground with kids rolling around in the dirt. If it's not gonna be a field where your farming crops that might pull up heavy heavy metals. Then, you might be willing to tolerate a higher level of er, higher level of of risk.

If you just gonna pave it over and you can be assured that there's not gonna be migration of er of hazardous substances. You may be willing tolerate a higher level of risk.

So we had legislation that made it possible to consider alternative levels of clean up. And then we had a process that allowed citizens to consider whether they wanted to make these trade-offs in a way that was credible.

**Narrator:** Legislators may have opened the door to redevelopment, but historians play an important role in identifying the hidden hazards.

**Joel** It's often easy to forget what kinds of activity had been on a particular site, seventy five, a hundred years ago, yet these activities, be they a gas manufacturing plant or a coke plant could have left an inheritance, a burden of toxic substances that were buried and forgotten about .

**Narrator:** The clean-up of Herr's Island involved burying the hazardous materials in a lined and capped area at the northern end of the Island.

The site is monitored to ensure that there's no build up of gases and that no seepage into the surrounding river.

The environmental and health risks are so low that the burial area forms the centrepiece of the leisure zone of this successful brownfield site.