

REFLECTIONS ON ENVIRONMENTAL LIABILITY SCHEMES IN THE UNITED STATES AND EUROPEAN UNION: LIMITATIONS AND PROSPECTS FOR IMPROVEMENT*

Nicholas Askounes Ashford
Professor of Technology and Policy
Director MIT Technology and Law Program
Massachusetts Institute of Technology

Introduction

We are constantly confronted with cases of severe damage to the environment resulting from human acts. High profile cases capture the international community's attention briefly such as the infamous 1989 Exxon Valdez oil release in Alaska's Prince William Sound and more recently, the accident with the Erika oil tanker in the South of Spain, two examples of cases where human activities have resulted in substantial damage to the environment. In addition to these catastrophic events, mankind also releases countless harmful substances to land, water, and air on a daily basis. Both the United States and the European Union responded to create liability schemes for damage to the environment, although some two decades apart. Neither scheme provides for liability for personal injury or property values, leaving that to the individual 50 U.S. states and the Member States of the European Union, respectively.

For an environmental liability system to be effective, the regulation of hazardous and solid waste (and air and water pollution) must be linked policy-wise to environmental liability initiatives. Environmental liability and environmental regulation are complementary schemes and must be evaluated in terms of the extent to which they advance the *precautionary principle*, *pollution prevention*, and *public participation*. These are explicit tenets of European Union environmental law, but they are also appropriate benchmarks for the evaluation of any environmental liability scheme.

The precautionary principle has two distinct formulations¹ regarding the protection of the environment and public health:

- (1). Where there are possibilities of large or irreversible serious effects, scientific uncertainty *should not prevent* protective actions from being taken.
- (2). Where there are possibilities of large or irreversible serious effects, *action should be taken*, even if there is considerable scientific uncertainty.

The first formulation in the international context appears prominently in the Brundtland formulation agreed to in the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, and recurs in many multilateral environmental agreements. It constitutes what might be called a *permissive use* of precautionary measures. The second formulation appears in some multilateral agreements and in some European Union (EU) directives on environmental protection and requires precaution as a *prescriptive measure*². In the context of environmental liability, limiting the reach of the precautionary

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¹ de Sadeleer, N. (2002) *Environmental Principles: From Political Slogans to Legal Rules*, Oxford University Press, Oxford.

² See especially de Sadeleer, 2007 and Ashford, 2007.

principle minimizes societal protection and environmental restoration because scientific uncertainties and the lack of sufficient data will be trumped by potentially large restoration or remediation costs

Options for addressing responsibility for environmental damage from pollution range from (1) preventing pollution at the source by changing the inputs, process technology and methods, and final products of industrial, agricultural, and transport activities, (2) minimizing, eliminating, or otherwise preventing further proliferation of releases of harmful substances into the environment, (3) remediating damage and/or restoring environmental areas, and (4) compensating those harmed or the government as the societal trustee. Later stage interventions, or backwards-focused pressure/incentives after contamination has already occurred, are the least effective means of achieving prevention. In other words, the prevention of the spreading of contamination (remediation) is not the same as preventing the releases in the first place (control) or preventing the use of toxic materials in production and products (primary prevention).

Invoking the polluter-pays principle at the end of the pollution life-cycle is either likely to be excessively costly or to lead to inadequate societal protection/environmental restoration. Furthermore, barriers to invoking the precautionary principle at the end of the pollution life-cycle is likely to lead to inadequate societal protection/environmental restoration.

Finally, limiting public participation – especially where government is reluctant to act -- is likely to lead to inadequate societal protection/environmental restoration.

There is a dual legal system relevant to environmental protection and liability in both the US and the EU, but they are different. The US authority for regulation and liability are divided between the Federal and state governments, but there is little ambiguity as to responsibilities and remedies. The division of authority between the EU and its Member States is evolving, is sometimes unclear, and results in legal loopholes inviting non-action as the discussion below illustrates.

U.S. Environmental Liability

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), and Superfund Amendments of 1986, addressed environmental liability in the U.S. The law established strict liability for polluters of land and water (except for pesticide applicators, petroleum, fuels, and most nuclear materials) in sites qualifying for National Priority List (NPL) designation³, and also set up a Hazardous Response Trust Fund (the Superfund) that was to be used to clean up toxic contaminants for which a financially-solvent polluter could not be found⁴. A tax on the chemical and petroleum industries populated the fund. The act imposed joint, several, and retroactive liability which meant that if any polluter was unable to pay for the cleanup at a particular site, then the burden was imposed on other contributors who could be said to be required to pay “more than their fair share” of the cleanup expenses. To date, billions of dollars have been spent and not all the designated sites have been cleaned up.

³ States have the option to keep a site off the federal NPL list and address the remediation themselves, reflecting a major concern of effects on the property values in the contaminated community.

⁴ After a high of \$3.8 billion in 1987, the fund remained insolvent since 2003. In early 2009, a bill reauthorizing the tax was introduced in the US House of Representatives (The Superfund Polluter Pays Act of 2009, H.R. 832) and is expected to pass the Senate.

Polluters are expected to report and remediate releases in excess of thresholds listed in the Act for some 700 'hazardous substances' and also for other 'pollutants/contaminants'. Clean-up standards are based on the most restrictive federal and applicable state standard. Note, however, that the federal water-based Maximum Contaminant Levels are presently relaxed as a result of intense industry lobbying in the prior decade. Polluters are expected to remediate sites to levels indicated by those standards, unless the sites qualify for 'brownfield status.' Brownfields' designation allows sites to be cleaned up to a lesser degree for use as commercial property, partly satisfying some 'environmental justice' communities with the prospects of economic development (Ashford and Rest, 2001)

In addition to joint, several, and retroactive liability for contamination, the Act envisioned establishing financial responsibility assurances requiring that at-risk firms set aside surety bonds or designated funds in the event that future contamination occurred from their operations. These provisions of Act were never implemented, but in May 2009, a federal district ordered EPA to carry out the first step of preparing and listing industries that would have to demonstrate such financial responsibility (*Sierra Club v. EPA*, N.D. Cal., No. C 08-1409, Feb 25, 2009).

In December 2004, the EPA (2004) projected that as many as 350,000 contaminated sites will require cleanup over the next 30 years, assuming current regulations and practices remain the same. The bill for this cleanup may amount to as much as \$250 billion. In its report, the EPA (2004) provides an estimation of remaining hazardous wastes sites needing remediation efforts (Figure 1). EPA explains:⁵

According to the report, there will be a need to address many smaller sites such as those containing Underground Storage Tanks (UST) (43% of the total sites) and various hazardous waste properties (50% of the total sites). These two site categories, however, only account for twenty two percent of the costs. The remaining seven percent of sites, including those on the National Priorities List and U.S. Department of Defense and Department of Energy sites, tend to be larger, more complex and more costly to remediate and will thus require a larger share of funding. ... There is a trend toward more risk-based cleanup approaches and more attention to redevelopment of cleaned up sites in selecting and implementing remedies in most cleanup programs. Underlying these trends is the acceptance, in recent years of improved approaches to site characterization, which has been demonstrated to lead to faster, cheaper, and better cleanups.

⁵ Source: EPA, Superfund, New Report Projects Number, Cost and Nature of Contaminated Site Cleanups in the U.S. Over Next 30 Years, <http://www.epa.gov/superfund/accomp/news/30years.htm> (accessed on 01/28/09).

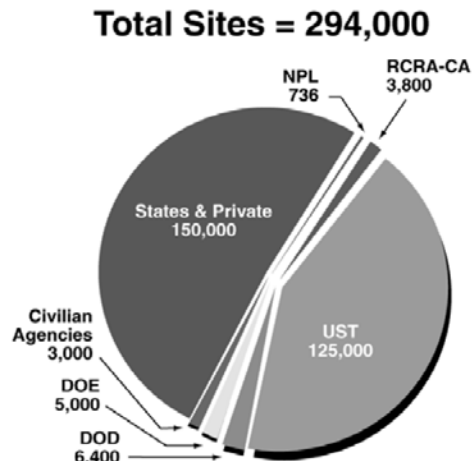


Figure 1: Estimated Number of Hazardous Waste Sites 2004-2033

While recovery for personal injury and damage to property is left to the already-existing remedies available in the 50 individual states, CERCLA/SARA did establish the Agency for Toxic Substances & Disease Registry (ATSDR) which (1) keeps a registry of exposures and diseases attributable to toxic substances, (2) constructs toxicological profiles of chemicals, and (3) performs preliminary health risk assessments at sites that are candidate for remediation. There has been enormous contention over sites/contaminated communities that have a multitude of so-called “low-level exposures”, no one of which has firm toxicological or epidemiological evidence of significant risk. Yet those communities suffer a myriad of health problems. ATSDR was created because the public did not trust EPA’s assessment of risk. However, under the previous administration, ATSDR has lost the confidence of the public and did not apply the precautionary principle in its assessments.

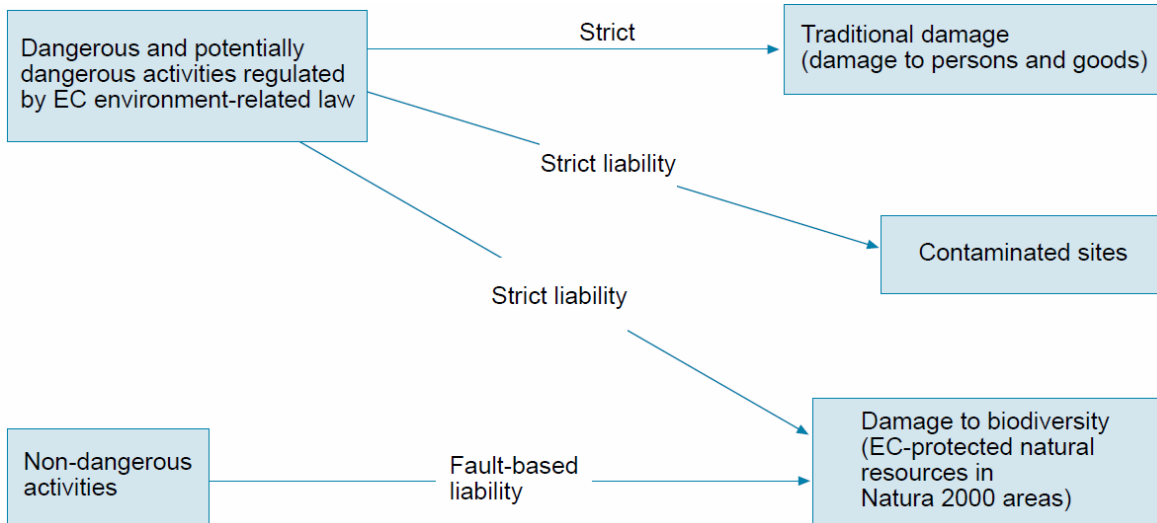
Citizens not only have standing to intervene in government decisions (including judicial review), but also have access to the courts for injunctive relief against the government if it does not act. Exemptions from liability is provided for non-managing lenders, some ‘innocent purchasers’, non-negligent contractors. Also exempted from joint and several liability are Potentially Responsible Parties (PRPs) who bear the burden of proving non-responsibility (where pollution type is identifiable and divisible) or of demonstrating that their pollution is reliably attributable in size (Liptak, 2009).

European Union Environmental Liability

Taking into consideration the trials and tribulations of the U.S. Superfund model of environmental liability, the European Commission issued a White Paper on Environmental Liability in February 2000. The objective of the White Paper was to provide for strict liability for conventional and environmental damage caused by ‘dangerous’ activities regulated by EC law, and fault liability for natural resource damage caused by non-dangerous activities (Bergkamp 2000). A visual representation of the EU environmental liability envisioned in the White Paper is represented in Figure 2. Note, however that liability for ‘traditional damages’ (personal injury and property damage was excised from the final Directive 2005/35/EC). The White Paper addressed the preventative, precautionary, and polluter pays principles and how these can best be applied to serve the aims of Community environmental policy.

Bergkamp (2000) argued that the EC’s argument in the White Paper was weak, and that a liability regime might not ensure further decontamination and restoration of the environment

nor boost the implementation of compliance, since Member States are already required to protect and restore damaged natural resources, and mandate remediation of contaminated sites through a liability regime. For cases where environmental damage is widespread without a clear link to the activities of any individual actors (called ‘diffuse pollution’), the Commission argued that liability is not a suitable instrument. Examples of diffuse, multi-source damage includes climate change due to CO₂ emissions, forest damage caused by acid rain, air pollution effects from industry or traffic, and fertilizer and pesticide runoff. These shared environmental problems, as discussed elsewhere in this book and chapter, are the subject of many emerging international agreements, protocols, negotiations, and the like.



Source: European Commission (2000, p. 9).

Figure 2: Scope of EC Environmental Liability Regime Envisioned by the White Paper (note: traditional damages were ultimately eliminated by the EU Directive 2004/35/EC)

However, despite criticisms of the strict and fault liability regime outlined in the White Paper, the EC was not discouraged by the disappointing U.S. experience with civil liability regimes for environmental harm. The EC commented:⁶

So far, the Member States of the European Union have established national environmental liability regimes that cover damage to persons and goods, and they have introduced laws to deal with liability for, and clean up of, contaminated sites. However, until now, these national regimes have not really addressed the issue of liability for damage to nature. This is one reason why economic actors have focused on their responsibilities to other people's health or property, but have not tended to consider their responsibilities for damage to the wider environment. This has been seen traditionally as a ‘public good’ for which society as a whole should be responsible, rather than something the individual actor who actually caused the damage should bear. The introduction of liability for damage to nature, as proposed in the White Paper, is expected to bring about a change of attitude that should result in an increased level of prevention and precaution.

On adoption of the White Paper by the Commission, Environment Commissioner Margot Wallström stated: “We have now laid the foundations for an environmental liability regime

⁶ Source: European Commission, Environmental Liability, White Paper on Environmental Liability, http://ec.europa.eu/environment/liability/white_paper.htm (accessed on 08/20/04).

for Europe. Legislation in this field will provide common rules to ensure that polluters will effectively be held responsible for environmental damage they cause. This will improve protection of the health of Europeans and our natural environment.”

...

In case of environmental damage, the compensation to be paid by the polluter should be spent on the effective restoration of the damage. Furthermore, for cases concerning environmental damage, public interest groups should have a right to step into the shoes of public authorities, where these are responsible for tackling environmental damage but have not acted. Such groups should also be allowed to take action in urgent cases if there is a need to prevent damage. This is in line with the 1998 Århus Convention on access to information, public participation in decision-making and access to justice, a UN/ECE Convention that has been signed by the Community and all the EU Member States, as well as by other states.

In April 2004, some twenty-four years after the US's adoption of CERCLA, the European Community adopted the EU Directive 2004/35/EC on environmental liability,⁷ addressing the prevention and remedying of environmental damage.⁸ The directive has had much opposition from industry, but despite this resistance, the Committee voted in favor of strict rules and called for a wide financial and legal accountability of polluters. Under the new directive, the polluter pays principle is fundamental and demonstrates that in many cases the operator who causes damage should be held liable, i.e., be financially responsible. The directive aims to ensure that future environmental damage is paid by the polluter, and preferably prevented. The directive specifically included the issues of biodiversity and nature damage, water and land contamination, and damage from genetically modified organisms (GMOs).

The Directive 2004/35/EC has been the subject of much commentary and criticism and is acknowledged to be significantly weaker than the approaches recommended in the White Paper (Betlem, 2005; Fogelman, 2006; Krämer, 2005; and Winter et al., 2008). The following outlines the ultimate scheme:

- Areas of Liability for Operators (private and public)
 - » For Prevention and Restoration (Remediation) of Environmental Damage to water soil/land, and protected species and natural habitats
 - Strict, joint, and several liability for damage caused after April 30, 2007 for ‘occupational activities’ listed in Annex III reflecting IPPC permitting and 11 other Directives including the Water Directive, and directives addressing Waste Management, and Air Pollution
 - » For restoration/remediation of damage to EU directive-protected species and natural habitats arising from ‘other [than Annex III] activities’: at fault liability (negligence)
 - » Damage is assessed relative to the (before-hand) baseline conditions
 - » Traditional damage (personal injury and damage to property) excluded
 - » Thresholds
 - Water: significant adverse impacts on resource status (quality and quantity)

⁷ Source: EUR-LEX, Proposal for a Directive of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage, http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=52002PC0017&model=guichett (accessed 08/26/04).

⁸ Source: Europa, Environmental Liability, <http://europa.eu.int/comm/environment/liability/> (accessed on 08/26/04).

- Soil: serious potential and actual harm to public health (soil erosion excluded)
 - Nature: significant adverse effects on the conservation status of the protected species & habitat.
- » Exemptions: oil spills and nuclear contamination
- Operators (private and public) have a duty to:
 - » Prevent, notify (report), and manage ‘environmental damage’ to land, water, protected species, and natural habitats
 - » Prevent & remediate ‘environmental damage’ associated with “dangerous or potentially dangerous occupational activities” [Annex III]
 - » Primary duty: to act in response to any governmental order
 - » Secondary duty: to bear the costs, premised on appropriate national law
 - » May be not always be liable for damage to species and natural habitats (if not in the EU directives)
 - » May be not always be liable for damage to water (if not required by the Water Directive)
 - » May be liable for damage (contamination) to land, providing the damage creates a “significant risk” to human health. (‘significant’ is undefined and creates an opportunity to impose a heavy evidentiary burden, not reflecting a precautionary approach). Diffuse pollution damage excluded unless causal relationship established between alleged polluter(s) and damage.
- Defenses available to Operators to defeat/reduce cost-bearing:
 - » Mandatory
 - Operators acted in accordance with a compulsory government order
 - Damage was due to the act of an unconnected third party
 - » Optional (established by each Member State)
 - Practices of care were based on the then-recognized potential for environmental impact by the Member State (state-of-art defense)
 - Operator was allowed to conduct itself in accordance with a permit issued by a Member State in accordance with legislation listed in Annex III
- Public Authorities:
 - » Must require preventive or remedial action by operators
 - If damage has not yet occurred, required actions are to be determined by the appropriate Member State
 - » May, but are not obliged to, take necessary measures in the case that
 - An operator is not identified, an operator doesn’t meet his/her obligations, or is not required to bear the costs (as a result of available defenses)
 - This in effect removes an enforceable mandatory state duty to act, unless required by other EU directives, e.g., the Water Directive.
 - » May recover remediation/restoration costs incurred by the authority, providing the Member State required the operator to have a dedicated fund for remediation/restoration.
- Citizens/NGOs:

- » Procedural rights somewhat expanded in administrative proceedings, but not with regard to standing in courts, though there exists a right to judicial review for the decisions of authorities or their refusals to act.
- » Comments of Citizens/NGOs must be supported by evidence and their comments on preventive measures to be taken on land are allowed at the discretion of the Member State.
- » They can request public authorities to act, but Member States can sometimes restrict or delay their access to the courts, in practice.

Commentary

A number of criticisms can be applied to the directive. While there are specific targets, e.g., good water quality by 2015 and favorable conservation status for birds and habitats, some benchmarks are lacking, such as specific reportable quantities of pollutants released (required under the US legislation). Significant environmental damage may go unabated since, unlike the US, public authorities are not required to act in many instances where polluters are not identified or insolvent.

Evidentiary burdens on citizens and NGOs are sometimes high or require too short a time to be borne, vitiating a precautionary approach. Significantly enhanced public participation promised by the Aarhus Convention is not achieved.

The prevention of pollution at the source is actually not a driver of this directive. Instead, prevention focuses on the prevention of releases or their subsequent spread. Although technically included, damage from GMOs is hardly included.

Financial assurance mechanisms are needed, but are only 'encouraged' by the Member States. Liability with vary significantly among Member States.

The weakening of the directive, measured against the approaches initially recommended in the White Paper, is reminiscent of the weakening of the REACH initiative (Koch and Ashford, 2006).

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