

## **CASE STUDIES ILLUSTRATING IMPLEMENTATION OF THE ELD**

Valerie Fogleman, Consultant, Stevens & Bolton LLP  
Professor of Law, Cardiff University School of Law and Politics

## CASE STUDIES

- Implementation of the ELD and Water Framework Directive (WFD) (Sweden)
- Water damage / biodiversity damage / compensatory remediation (Finland)
- Separation of an environmental damage occurrence into ELD and non-ELD cases / compensatory remediation and proportionality (Denmark)
- Monetary compensation to the State / air pollution (Lithuania)
- Preventive measures / insolvent operator (Bulgaria)
- Extraterritorial pollution (France)

## IMPLEMENTATION OF THE ELD AND THE WFD

- **Issue:** When should environmental damage under the ELD to a surface water body be remediated and future damage prevented when a review of the damage and measures to achieve good ecological status pursuant to the WFD are not planned for over 10 years?
  - Issue also affects the proposed Nature Restoration Regulation because the Regulation sets out a framework for restoration measures, targets and obligations
- Relevant criteria: Coherence

## IMPLEMENTATION OF THE ELD AND THE WFD

- A citizen notified the competent authority that operation of a hydroelectric power plant in Sweden had caused damage to the ecological status of a lake due to fluctuations in the water level
- Authorisation for the power plant had been granted before the WFD and the ELD came into effect
- Authority dismissed the complaint on the basis that the (annex III) operator was in compliance with its permit
- Citizen appealed the dismissal to the Land and Environment Court
- Court remanded the case to the authority to determine whether there was water damage under the ELD and significant negative effects on the lake's ecological status
- Meanwhile, the water level in the lake rose substantially due to operations at the power plant; operator voluntarily lowered the level

## IMPLEMENTATION OF THE ELD AND THE WFD

- Authority determined there was water damage under the ELD and ordered the operator to submit proposals to drain the lake and connected lakes and rivers (water bodies) and to allow fish to migrate
- Operator appealed the authority's order on the following basis
  - Only after the reviews of the water bodies under the WFD are carried out (planned for 2036), will measures to achieve good ecological status be known
  - Water damage under the ELD has not occurred and even if it had occurred, water bodies would be in good ecological status under the national WFD plan by 2039

## IMPLEMENTATION OF THE ELD AND THE WFD

- Court agreed with the operator and lifted the order, stating
  - Baseline condition for the water bodies is 1 August 2007 when the ELD was transposed into national legislation
    - If condition at that time had not changed, water damage had not occurred
      - Note: effective date is after 30 April 2007
  - Authority's conclusion that remediation should be carried out was due to it having carried out a more extensive assessment of damage to the water bodies than the WFD process to determine their classification
  - Order was not aimed at remedying environmental damage that had occurred or preventing such damage but was a complete re-assessment of the operator's activities
- Application for an appeal was denied

# WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- **Issues**

- Is damage to a water body that does not result in a reduction of its classification under the WFD 'water damage' under the ELD?
- Is damage to biodiversity that has an adverse effect on its favourable conservation status at a local, but not a Member State (MS) or EU level, 'biodiversity damage' under the ELD?

- **Relevant criteria: Effectiveness**

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- July 2014: equipment failure at a nickel production facility in Finland caused discharge of a solution containing 66 tonnes of cobalt, 94 tonnes of sulphate, and other metals
- Pollutants vastly exceeded emission limit value for nickel in the operator's Industrial Emissions Directive (IED) permit
- Pollutants affected two water bodies in a 35-kilometre stretch of the adjacent river and at least 10 to 12 water bodies in the estuary and coastal waters
- Over four million mussels, including over one million mussels listed in the Habitats Directive, were killed
- Baseline condition of protected mussels was not known but population was considered one of the most important in Finland
- Operator notified the competent authority of the discharge and voluntarily carried out investigative and monitoring measures



## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- August 2014: nickel concentrations had decreased below environmental quality standard for nickel in affected waters but remained elevated in sediments
- May 2015: Authority
  - Ordered the operator to continue to carry out monitoring and other measures pursuant to conditions in its permit
    - On the basis of the monitoring results, requested the operator to submit a proposal to remedy the environmental damage
  - Made a preliminary assessment that the discharge had caused biodiversity damage and significant pollution of a water body
    - Permitting legislation requires an operator that causes such biodiversity damage or pollution to carry out remedial measures under national ELD legislation in addition to measures under environmental permitting legislation

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Operator argued that it was not required to carry out remediation under the ELD because
  - Although damage to protected mussels was significant at a local level, their conservation status and natural habitat had not decreased at a national or EU level
  - Damage to water was not significant because the discharge had not impacted the chemical status or the biological and physico-chemical quality factors or the river and its ecological potential
    - Although the discharge had affected some species of mussels that were not protected by the Habitats Directive, they were not indicators that needed to be taken into account in assessing damage to the water body under the WFD

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Operator proposed various remediation measures including
  - Continue monitoring to assess whether the mussels had returned to their baseline condition and, if not, carry out additional remediation measures
  - Contribute to the relocation of about 10,000 mussels, especially protected mussels, that would otherwise be destroyed as part of a derogation from the Habitats Directive for a flood protection project in a nearby municipality, to a water body not affected by industrial and wastewater discharges to the extent that persons carrying out the dredging were not otherwise required to relocate the mussels
- March 2016: Authority announced a public consultation of its proposal to order the operator to carry out primary and compensatory remediation and, if primary remediation did not restore water and biodiversity to their baseline condition, complementary remediation
  - Authority also consulted the Finnish Environment Institute and various health authorities, affected municipalities and the fisheries authority

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Operator submitted comments; stated that it was not required to carry out remediation under the ELD; disputed other comments; and stated that services of the damaged natural resources to people and other natural resources had not been impaired
- June 2017: authority issued a final decision that concluded that the operator had caused biodiversity and water damage under the ELD
  - Ordered the operator to carry out various measures including primary and compensatory remediation (relocation of mussels) and, if monitoring showed that primary remediation had not succeeded by June 2025, complementary remediation
  - Proposed fines if the operator failed to comply with the order
- Operator appealed the order to the Administrative Court
  - December 2019: Court dismissed the appeal

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Operator appealed Administrative Court's judgment
- June 2022: Supreme Administrative Court dismissed the appeal and ruled that the operator must comply with the authority's order

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Supreme Administrative Court's judgment (biodiversity damage)
  - Referred to Commission's guidelines on environmental damage and ruled that the damage was biodiversity damage under the ELD
    - Definition of biodiversity damage in the ELD states that significance is determined by reference to 'the European territory of the [MS] to which the Treaty applies or the territory of a [MS] or the natural range of that habitat [or species]'
    - ELD is thus unclear whether damage to a species or natural habitat needs to affect one or all the above, or whether local damage meets the significance criteria
  - Commission's guidelines
    - 'Assessment and determination of significance need to be meaningful at the local level. ... It does not mean that adverse effects have to be demonstrated at the national and European levels'
    - That is, significance can be based on damage at a local level only

## WATER DAMAGE / BIODIVERSITY DAMAGE / COMPENSATORY REMEDIATION

- Supreme Administrative Court (water damage)
  - Referred to Commission's guidelines and ruled that the damage was water damage under the ELD
    - ELD is unclear whether an entire water body or only 'waters' must be significantly affected in order for there to be water damage under the ELD

'any damage that significantly adversely affects the ecological, chemical and/or quantitative status and/or ecological potential, as defined in Directive 2000/60/EC, of the waters concerned ...'
    - That is, the definition refers to 'waters concerned' but significance criteria refer to classifications of water bodies under the WFD
  - Commission's guidelines state that an entire water body need not be damaged and that the status of a water body need not be reduced to a lower classification for water damage under the ELD to occur
    - Commented that classification of the ecological status of surface water bodies under the WFD does not take into account damage to mussels and thus does not necessarily provide a comprehensive picture of the status

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- **Issues**

- May a single environmental damage occurrence be divided into land, water, and/or biodiversity damage – or should all three be assessed together in determining measures to remediate the damage?
- Should a decision whether to require compensatory damage take into account the cost of consultancy and other non-remedial measures?

- **Relevant criteria: Effectiveness, Coherence**



## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- September 2018: approximately 100 tonnes of fertiliser leaked from a hosepipe applying it to fields in Denmark
- Fertiliser entered the ground and a stream from which it entered other watercourses
- All the fish in a 15-kilometre stretch of the watercourses were killed
- Ecological status of mussels and other wildlife in the watercourses declined
- Estimated that if pollution was treated, it would take three to five years for the watercourses to be restored to their baseline condition
- Fertiliser also entered a fjord but was anticipated to recover in less than a year
  - Authority did not require remediation under the ELD because, according to Danish guidelines, damage to waters that recovers in one year or less is not considered to be water damage under the ELD

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- Relevant legislation involves a municipality and the Environmental Protection Agency (EPA) as competent authorities
  - Municipality determines whether there is an imminent threat of, or actual, environmental damage
  - If so, municipality makes a determination of environmental damage and, if the EPA agrees, the EPA makes a binding determination and enforces national ELD legislation
  - If the EPA does not agree, the municipality retains competence under relevant non-ELD legislation
- Operator (small non-annex III company), with agreement of its insurer, began voluntarily remediating pollution from the leak of fertiliser
- Municipality ordered the operator to carry out further measures to remediate the damage and prevent further damage

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- Municipality assessed whether there was damage under the ELD to the watercourses
  - Did not assess whether damage to ground/soil or the banks of the watercourses was land damage or the potential for pollutants in them to enter the watercourses or groundwater
- October 2018: Municipality concluded there was damage to the watercourses and the operator was liable for remediating it
- December 2018: EPA agreed and concluded that
  - Operator should monitor affected fish and other fauna
  - No grounds to order further measures because immediate measures after the spill were sufficient for the watercourses to be restored to their baseline condition within a reasonable time
  - No grounds to order compensatory remediation on three kilometres of the watercourse (calculated using resource-to-resource/service-to-service remedial equivalence approach in annex II of ELD) because the costs of doing so were high

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- March 2020: EPA received a report on the monitoring measures
  - Concluded that waters had mostly recovered
  - Reiterated its determination of no need for further measures including compensatory remediation
  - Justified decision for no compensatory remediation on proportionality considerations, stating that consultancy and other non-remediation costs were about 23% of total costs
- February 2021: EPA issued a draft decision on environmental damage for public consultation
  - Municipality and two angling clubs queried the EPA's decision that no further primary remediation was required when damage was still visible and aquatic fauna had not attained their baseline condition
  - Municipality also queried no requirement for compensatory remediation on grounds of proportionality
    - Stated that it would be difficult to impose compensatory remediation in the future because non-remediation costs would often be higher than remediation costs

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- February 2022: EPA issued new draft decision for consultation
  - Reiterated that no further mitigation measures or compensatory remediation was required
- March 2022: EPA issued its final decision with the same conclusions
- May 2022: angling clubs appealed the decision
  - Argued that fish and benthic invertebrates had not fully recovered and contrasted the value of, and revenues from, recreational fishing against the EPA's estimates of carrying out compensatory remediation
- EPA disagreed; referred the case to the Environmental and Food Appeals Tribunal
- EPA noted that practical application of the ELD was cumbersome and inefficient and that it would take this into account in its evaluation of the case

## SEPARATION OF CASES / COMPENSATORY REMEDIATION AND PROPORTIONALITY

- Meanwhile, municipality – at the request of the operator and its lawyers (appointed by its insurer) and before water damage had been assessed – had stated that soil damage should be remediated under the Contaminated Soil Act (national non-ELD legislation)
- Municipality stated that in its assessment: ‘circumstances surrounding the spill on soil can be dealt with independently and should not await a decision on the watercourse contamination’
- Municipality ordered the operator to investigate and, on the basis of its investigation, assess the risk of pollutants entering the groundwater, watercourses, people and other receptors
- Order also stated that, if appropriate, operator should submit proposals for remediation measures or carry out such measures voluntarily
- Operator voluntarily carried out the remediation measures

# MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- **Issues**

- How is the ELD enforced when national non-ELD and national ELD legislation provide for monetary compensation to the State?
- Should the ELD be extended to include the prevention and remediation of damage to air?

- Relevant criteria: effectiveness

## MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- October 2019: massive fire at a tyre recycling facility in Lithuania (annex III operator)
- Competent authority determined it was an ELD occurrence due to damage to land, water and protected species and natural habitats
- Fire also resulted in damage to air and other wildlife
- Application of environmental permitting legislation by competent authority
  - May 2020: required variance to operator's permit pursuant to the IED and other environmental permitting legislation
  - September 2020: revoked the permit on the basis that the operator was not complying with applicable legislation on handling and disposing of waste
    - Operator appealed authority's decisions to various levels of courts
- Municipality prohibited operator from carrying out any activities in the burnt structure at the facility until its condition was improved



## MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- Relevant legislation on monetary compensation to the State
  - If a legal or natural person causes pollution as a result of unlawfully discharging pollutants into the environment and/or discharging them in an unlawful manner or at an unauthorised location, environmental damage is assessed and calculated
  - Methodology for calculating environmental damage applies to ELD and non-ELD occurrences
    - Sets out rates of compensation for specified pollutants to ambient air, surface or groundwater bodies and/or soil and subsoil
    - Does not include compensation for bodily injury or property damage
    - Operator may purchase insurance to cover the costs

## MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- Application of methodology for payment of monetary compensation resulted in the following
  - Damage to water: EUR 599,691.43 – caused by the discharge of 62,656.05 cubic metres of contaminated fire-fighting water into surface water bodies
  - Damage to air: EUR 14,078,671.39 – caused by pollutants entering the ambient air from the fire
  - Damage to wildlife: EUR 342.78 – caused by the death of a hare by smoke inhalation

## MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- State also reimbursed authorities for costs of extinguishing the fire, removing and disposing of hazardous waste from the facility
- State also paid compensation to businesses affected by air pollution including bans on the sale of milk, suspension of businesses, etc.

## MONETARY COMPENSATION TO THE STATE / AIR DAMAGE

- October 2019: regional prosecutor's office began a criminal investigation
  - To establish the origins of the fire, extent of damage and whether all fire safety requirements and environmental protection practices were carried out
  - To examine and evaluate actions of the authorities that supervised activities concerning the fire and its aftermath
- March 2021: resulted in a criminal case against the operator and seven natural persons
  - Included a claim by the prosecutor for over EUR 5,000,000 for costs incurred by the State in extinguishing the fire
  - ELD competent authority is a civil claimant for environmental damage in the criminal litigation
- Also resulted in a criminal case against members of the fire authority for not ensuring that State fire supervision and regulations were complied with

## PREVENTIVE MEASURES / INSOLVENT OPERATOR

- **Issue:** How is the ELD enforced when there is an insolvent operator and a need for measures to prevent environmental damage?
- Relevant criteria: Effectiveness

## PREVENTIVE MEASURES / INSOLVENT OPERATOR

- May 2012: (annex III) operator notified the competent authority of an imminent threat of damage to land/soil, water and biodiversity
  - Rupture of a tank containing waste trichloroethane had caused its contents to enter the surrounding bund
  - Notification stated that the reason for the imminent threat was 'repeated entry onto the company's site with the aim of looting the facilities and the possibility of destroying the integrity of the waste storage tank'
- Competent authority inspected the facility and requested the operator to provide further information
- Operator provided the information

## PREVENTIVE MEASURES / INSOLVENT OPERATOR

- Competent authority ordered the operator to remove the waste trichloroethane from the bund and dispose of it
  - Some waste was removed to another tank in the same bund to prevent further leakage
- Operator complied
- December 2012: Operator became insolvent
- March 2013: competent authority ordered the receiver of the insolvency estate to ensure that remaining waste trichloroethane at the facility was properly handled and to carry out preventive measures
  - Receiver stated that it was not possible to comply with the order because of the insolvency proceedings
- June 2013: competent authority ordered the receiver to comply with the order and issued a penalty notice of nearly three million Euros
  - Order was annulled following an appeal by the receiver

## PREVENTIVE MEASURES / INSOLVENT OPERATOR

- April 2013: meanwhile, the competent authority designated the regional governor as the responsible person for implementing the preventive measures
- July 2013: regional governor initiated a procedure to select a contractor to prepare specifications to remove the trichloroethane and to estimate the costs
- Selection procedure was terminated and a new procedure subsequently began
- Contractor was selected and submitted the specifications and estimate to the regional governor
- 2016: regional governor asked the contractor to update the specifications and the estimate for them
- 13 September: contractor updated and provided them
- December 2016: regional governor launched a call for tenders to transport and treat and dispose of the waste



## PREVENTIVE MEASURES / INSOLVENT OPERATOR

- June 2017: receiver sold the land at the facility
  - Did not include the two tanks of waste trichloroethane
- June 2019: Council of Ministers issued a decree to approve additional works in the amount of EUR 1,176,865
- May 2020: contractor completed transportation and disposal of 2,640 tonnes of waste
  - Notified the regional governor that a further 450 tonnes of waste remained at the facility
- Competent authority subsequently discovered an additional 147 tonnes of waste plus residual sludge in the tanks
- April 2021: all necessary preventive and remedial measures were completed

## EXTRATERRITORIAL POLLUTION

- **Issue:** Is the ELD effective in ensuring the remediation of cross-boundary pollution?
- Relevant criteria: Effectiveness

## EXTRATERRITORIAL POLLUTION

- A dyke at a large settling basin at a sugar processing plant in northern France ruptured, resulting in approximately 100,000 cubic metres of waste water polluted with sugar beet pulp entering the River Scheldt, which flows through Belgium and the Netherlands
- Pollutant consumed all the oxygen from large stretches of the river and its tributaries
- Pollution resulted in a massive mortality of fish and other aquatic fauna in France and the Walloon Region of Belgium
  - Authorities in the Walloon Region were not provided with sufficient notice to carry out adequate preventive measures
- Authorities in the Flemish Region had more notice but the pollution still caused damage – to a lesser extent – in that region
- Polluted water also entered about 20 houses in France

## EXTRATERRITORIAL POLLUTION

- French competent authority
  - Ordered the (annex III; IED) operator to remediate the water damage in France
    - Remediation carried out under environmental permitting legislation
      - Includes restoration of 10 hectares of aquatic environment and wetlands
    - No authority to order operator to carry out measures in Belgium
  - Established a steering committee for the ecological restoration of the River Scheldt
- Note: international treaty on the River Scheldt
  - French, Belgian and Dutch authorities are liaising to co-operate better in implementation, especially cross-border alerts

## EXTRATERRITORIAL POLLUTION

- Operator accepted liability for damage in France but has disputed it in Belgium
- Authorities and other persons in Belgium filed a criminal complaint with a civil action against the operator in Belgium
- Operator was also referred to a French criminal court
  - Case was heard on 17 and 18 November 2022

## EXTRATERRITORIAL POLLUTION

- Article 15 of the ELD provides
  1. 'Where environmental damage affects or is likely to affect several [MS], those [MS] shall cooperate, including through the appropriate exchange of information, with a view to ensuring that preventive action and, where necessary, remedial action is taken in respect of any such environmental damage.
  2. Where environmental damage has occurred, the [MS] in whose territory the damage originates shall provide sufficient information to the potentially affected [MS].
  3. Where a [MS] identifies damage within its borders which has not been caused within them it may report the issue to the Commission and any other [MS] concerned; *it may make recommendations for the adoption of preventive or remedial measures and it may seek, in accordance with this Directive, to recover the costs it has incurred in relation to the adoption of preventive or remedial measures'* (emphasis added)

## EXTRATERRITORIAL POLLUTION

- Article 15 does not provide affected an MS with authority to require operator to remediate environmental damage in an affected MS
  - Limited to recommendations
- What does requirement for reimbursement of the costs of carrying out preventive or remedial measures 'in accordance with' the ELD mean?