Institution: London School of Economics and Political Science

Unit of Assessment: 20: Law

Title of case study: Risk based regulation: the challenge of lower risks

1. Summary of the impact (indicative maximum 100 words)

The four Environment Agencies in England & Wales, Northern Ireland, Scotland and the Republic of Ireland have introduced, or are planning to introduce, new strategies for regulating low risk treatment sites and activities. These strategies are based on Black and Baldwin's research. Implementation is planned for 2011-13 onwards. The Irish Environmental Protection Agency has led the way in 2012-13, having already implemented GRID/GRAF in a specific low risk area (domestic waste water).

2. Underpinning research (indicative maximum 500 words)

All of the research was undertaken by Baldwin and Black, professors of law at LSE (Baldwin joined the Law Department in 1986, Black in 1994). They have worked on risk/regulation with a wide range of bodies during the REF period, including OECD, National Audit Office, Human Genetics Commission, Cabinet Office, Legal Services Board, Solicitors' Regulation Authority, the Bar Standards Board, the Jersey Financial Services Commission and the Law Commission of England and Wales. Black is also a member of the LSE's ESRC Centre for the Analysis of Risk and Regulation (CARR).

The research develops an innovative strategy for dealing with low risk sites and activities and offers a framework for deciding how best to intervene in order to regulate lower risks effectively and at lowest cost. The methodology – extensively elaborated in 2008, 2010a, 2010b, 2012, 2013a and 2013b – relies on both field and secondary research into compliance and enforcement mechanisms and risk-based regulation.

At the core of the research is a matrix, the Good Regulatory Intervention Design (GRID), which enables regulators to categorize activities according to breakdowns of two factors: the nature of the risk and the nature of the regulated entity. Using GRID, regulators can select which intervention tools to use – whether, for instance, to use inspections, information campaigns or other control techniques. GRID also provides guidance on the overall level of regulatory intensity that should apply (i.e., the level of resources to be brought to bear and the severity of sanctions to be deployed).

GRID is complemented by a Good Regulatory Assessment Framework (GRAF). The GRAF is a survey regime which enables agencies to review their performance when devising low risk strategies. Combined, GRID/GRAF provide regulatory agencies with a new approach to identifying and managing their regulatory priorities and resources in the face of expanding responsibilities and shrinking budgets. A detailed account of the Irish Environmental Protection Agency's implementation of GRID/GRAF in a specific area is set out in 2013b.

The underpinning research consists of (i) qualitative empirical research into risk based regulation in several countries and sectors (2005-2011); (ii) qualitative empirical research (carried out over a number of projects from 1995-2011) into compliance and enforcement practices by regulatory agencies; and (iii) development of a positive and normative framework (principally devised over 2006-2008) for compliance and enforcement action.

There were four stages to the research. The first was a desk-based review of regulators' approaches in five sectors and seven countries (including a web-based survey of field officers' practices and semi-structured interviews with agency officials). Stage two involved the development of the framework with reference to five specific areas of low risk, and revision of regulatory criteria in collaboration with inspectors, regulatory managers, regulated bodies, relevant NGOs and government departments. The third phase consisted of further 'verification' meetings

with senior policy officials within the agencies (a total of 38 officials across the four agencies). The final stage was the testing of the regulatory framework in workshops with the English Environment Agency and Scottish Environment Protection Agency (this took place in October 2011). The research phases are detailed in a series of policy documents (section 5, sources 2, 3 and 4).

3. References to the research (indicative maximum of six references)

(2008) R. Baldwin and J. Black, 'Really Responsive Regulation', 71 *Modern Law Review* 59-74 (national and international scholars' reliance on the research at e.g. (2011) 44 U. Brit. Colum. L. Rev. 695; (2011) 40 CWLR 174; (2010) 17 Int. J. Leg. Prof. 83). DOI: 10.1111/j.1468-2230.2008.00681.x

(2010a) J. Black, 'Risk Based Regulation: Choices, Practices and Lessons Learnt' in OECD Reviews of Regulatory Reform, Risk and Regulatory Policy: Improving the Governance of Risk, OECD, Paris, 2010. ISBN 978-92-08292-2 (print) 978-92-64-08293-9 (pdf) at http://www.oecd-ilibrary.org/governance/risk-and-regulatory-policy/risk-based-regulation_9789264082939-11-en

(2010b) J. Black and R. Baldwin, 'Really Responsive Risk Based Regulation', 32 *Law and Policy* 181-213 (national and international scholars' reliance on the research at e.g. (2013) 19 J Financ. Reg. & Compliance 321; (2013) 24 Stanford Law & Policy Rev. 550; (2012) 49 American Business L. J. 643). DOI: 10.1111/j.1467-9930.2010.00318.x

(2012) J. Black and R. Baldwin, 'When risk-based regulation aims low: A strategic framework', 6 *Regulation and Governance* 131-148. DOI: 10.1111/j.1748-5991.2012.01127.x

(2013a) J. Black and R. Baldwin, 'When Risk-Based Regulation Aims Low: Approaches and Challenges', 6 *Regulation and Governance* 1-21 (evidence of at least 2* quality: national and international scholars' reliance on the research at e.g. (2013) 7 Reg. & Gov. 215; (2013) J. Management Development 537). DOI: 10.1111/j.1748-5991.2011.01124.x http://eprints.lse.ac.uk/43339

(2013b) R. Baldwin, J. Black and G. O'Leary, 'Regulating Low Risks: Innovative Strategies and Implementation', 9 *LSE Law, Society and Economy Working Paper* 24. pp. (at http://eprints.lse.ac.uk/15809/)

Evidence of Quality: peer-reviewed journal articles and citations as noted above.

4. Details of the impact (indicative maximum 750 words)

The impact detailed below has been achieved as a consequence of the relevant regulators being involved throughout the research process. The policy-oriented research was commissioned by the agencies. Baldwin and Black secured the commission – the outcome of a competitive bid – because SNIFFER (the research forum for the agencies) recognized that their prior research (2008, 2010b) had been favourably received by many regulators and regulatory bodies.

The main objective of the commissioned research was to develop a strategy for regulating low risk sites. The data which Baldwin and Black (2012) uncovers provide an essential basis for understanding how and why risk-based regulation developed, how it was implemented, some of the key challenges of implementation, how these challenges could be addressed, and the significance of the institutional and political context for the development and operation of risk-based regulatory strategies in low risk contexts.

The Irish EPA has used the GRID/GRAF strategy to demonstrate legal compliance with its European regulatory obligations. Black and Baldwin have collaborated with the EPA in implementing that approach (and in providing an account of this process: 2013b pp.3-14; see also section 5, source 5). The Irish government had been found by the European Court of Justice to be in breach of its obligations under EU law for the inspection of septic tanks. In response, the EPA

developed a National Inspection Plan for septic tanks based on the Black/Baldwin approach (an account of the response is set out in 2013b pp.16-20). This has been approved by the EU Commission and was implemented in 2012.

Evidence of the impact of the Baldwin/Black approach can be found in chapter 4 of the Irish EPA's *Inspection Plan for Domestic Waste Water Systems* (section 5, source 6), where the Plan is explained. Following the Baldwin and Black framework, the EPA makes it clear in chapter 4 that determinations as to whether owners of domestic waste water treatment sites are complying with their statutory obligations should be based on regulatory standards which accord with "the principles of Better Regulation", which means (among other things) "focus[ing] on risk-based inspections" of treatment systems while also lowering the costs of carrying out risk assessments by introducing a site registration system which puts the burden on site owners to disclose, rather than on site inspectors to discover, risks of contamination (p.12). The details of the plan, elaborated at pp.13-28, are in line with GRID/GRAF specifications. According to Laura Burke, Director General of the Irish EPA:

> "[T]he research work [on GRID/GRAF] undertaken Professor Julia Black and Professor Robert Baldwin addressed a key challenge in the regulation of wastewater from single houses and was timely in that it influenced policy not only alone here in Ireland but also in the European Commission's Environment Directorate. The solution required an understanding of the challenge from an environmental perspective but also the motivation behind how people act on this environmental issue. Another unique and important feature of Professor Black and Baldwin's work was the interface between independent research and framing a solution for the regulator…. Overall, the output of the research work and the interface between research and policy is an excellent example of the value that can be gained from expenditure on environmental research." (Section 5, source 10.)

The reach of the research impact is considerable. The UK Environment Agency (UKEA) and the Scottish Environment Protection Agency (SEPA) utilized the Baldwin/Black framework when reviewing their approaches to regulating small sewage discharges (including septic tanks) in the waste and industrial sectors: see the testimonials from Nic Parr and Cath Preston (section 5, sources 7 and 8). The UKEA has used the framework as a strategic planning tool for areas other than low risk sites, and is keen to rely on it as a basis for policy discussions with Government. SEPA is using the GRID/GRAF model as the foundation for its "better regulation" approach to pollution prevention and control at three types of low risk site (water treatment facilities, petrol stations and dry cleaners): section 5, source 9. Furthermore, the EU network for the implementation and enforcement of environmental law (IMPEL) has expressed an interest in the research, as have environmental regulators in Australia.

Why the impact matters. As a result of Black & Baldwin's research having had the impact demonstrated in this study, monitoring protocols for low risk sites are being improved (so that the likelihood of poor water treatment and similar facilities being unsatisfactorily regulated is significantly lowered), and the Irish EPA, which was previously in breach of its European regulatory obligations, can now demonstrate compliance with the relevant provisions of the EU Environmental Directives.

5. Sources to corroborate the impact (indicative maximum of 10 references)
All Sources listed below can also be seen at: https://apps.lse.ac.uk/impact/case-study/view/38

Scholarly accounts

1. R. Baldwin, J. Black and G. O'Leary, 'Regulating Low Risks: Innovative Strategies and Implementation' (2013) 9 *LSE Law, Society and Economy Working Paper* 24 pp. (at http://www.lse.ac.uk/collections/law/wps/wps1.htm#0913).Source file: https://apps.lse.ac.uk/impact/download/file/1484

Policy reports in the public domain

2. SNIFFER, Description of regulatory approaches to assessing the effectiveness of regulatory activities at 'low-risk' sites and proposed good practice framework, Report for Phase 1 (at http://www.sniffer.org.uk/files/4413/4183/7990/ER13_Phase_1_report_Apr11.pdf).
https://apps.lse.ac.uk/impact/download/file/1483

3. SNIFFER, Description of regulatory approaches to assessing the effectiveness of regulatory activities at 'low-risk' sites and proposed good practice framework, Report for Phase 2; and

4. SNIFFER, Description of regulatory approaches to assessing the effectiveness of regulatory activities at 'low-risk' sites and proposed good practice framework, Final Report
(both the phase 2 and final reports are at:
http://www.sniffer.org.uk/files/3613/4183/7993/ER13_Project_report_Oct11.pdf).
https://apps.lse.ac.uk/impact/download/file/1485

5. Presentation of GRID/GRAF framework, and attendant findings, to Irish EPA officials (Dublin, Sept. 2012): www.epa-pictaural.com/s/wwater12/robertBaldwinJuliaBlack.php?playVideo=true

Official publications

6. EPA, *Inspection Plan for Domestic Waste Water Systems* (Dublin: EPA, 2013), at
http://www.epswater.ie/_fileupload/National%20Inspection%20Plan.pdf
https://apps.lse.ac.uk/impact/download/file/1481

Testimonials

7. Manager, Better Regulation team, UK Environment Agency: "The GRID and GRAF tools have been put out for use within the [UK] E[nvironment] A[gency] on a 'use when appropriate' basis for our national practitioners…. Specifically the tools have been … used by our project manager when reviewing our approach to regulating small sewage discharges (including septic tanks), considered by our sector groups when drawing up plans for our interventions with waste and industrial sectors, and considered as part of the evidence base as we think about future regulatory models."

8. Principal Policy Officer (Better Regulation), SEPA (Scottish Environmental Protection Agency),: "We have trialled the GRID/GRAF framework for one low risk activity as part of the development of a sector management strategy…. [T]he framework and approach was considered very useful in the strategy development and as a result we would like to pilot it further for other low risk activities in the coming year.".

9. Principal Policy Officer (Better Regulation), SEPA (Scottish Environmental Protection Agency),: "We [the 'better regulation' team at the Scottish Environment Protection Agency] have … 1. developed templates for the GRID and Intervention Guide which are being used to embed a 'better regulation' approach for certain low risk activities and provide the reasoning and justification for any strategies developed; 2. used the GRID and Intervention Guide to help develop approaches for petrol stations and dry cleaners; and 3. used the GRAF to help identify 'challenge' areas that require solutions.".

10. Director General of the Irish Environmental Protection Agency, testimonial. This source is confidential.