



## Regulating Scotland: What works and what does not in occupational and environmental health and what the future may hold

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### Section 1

#### Executive summary

Regulatory approaches to protect our health at work and to prevent pollution of our environment have improved by increments over several decades. Now these approaches are being questioned. The reasons given to justify a reappraisal vary, but globalisation and recession are the principal reasons cited by business and governments for ripping up the rule book. Some argue current high standards are not affordable in a global economy; others argue there are better, less burdensome alternatives to regulation.

Assumed throughout is that the established safeguards on our lives, our environment and our welfare are costly, and it is a cost we can no longer afford to pay. But poor health too comes at a cost. Scotland has one the highest rates of workplace sickness absence in the UK, and work-related ill-health and injuries are responsible for about a quarter of this. It is a sizeable and particularly preventable slice of the total sick leave toll. The contribution of poor environmental standards is poorly quantified, but is certainly real and certainly substantial.

This is not a cost borne equally across Scottish society. A much greater burden, witnessed by greatly increased mortality and morbidity, is seen the lower you travel down the socioeconomic scale. Poverty, a poor living and working environment and job insecurity are substantial contributory factors to this health inequity. It concentrates risks in sections of the community, many of which are easily identified and could be

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easily targeted for preventive action. However, strategies to address health inequalities in Scotland bypass occupational and environmental health and perpetuate this disadvantage.

This report presents an economic as well as a health case for retaining and improving regulations and their enforcement. Evidence in this report challenges the view that regulation inhibits job creation, innovation and economic growth. Instead, it shows only dirty and dangerous businesses have anything to fear from the enforcement of protective safety and environmental regulation. Business, workers and their communities and the public purse can all garner substantial benefits from laws that protect the responsible from the rogues.

This substantial benefit is not reflected in current and proposed practices. The report examines the current policies and programmes that advocate and implement deregulatory and 'better regulatory' actions by governments and agencies dealing with occupational and environmental health and safety. It analyses the evidence or lack of evidence underpinning such policies and how, within Scotland, the deregulatory agenda has emerged to shape the thinking of the leaders of agencies dealing with these subjects. It concludes unfounded claims of burdens on business are combined with skewed cost calculations to concoct a wholly unsustainable – economically, socially and environmentally – argument for deregulation.

The regulatory agencies responsible for environmental and workplace health and safety are already hobbled by a rapid loss of staff and resources. Overall HSE staffing in Scotland has fallen by over 5 per cent since 2008; since 2010 the number of frontline field inspectors in the country has fallen by almost 7 per cent. A shift towards less regulation and enforcement is well established, and is accelerating, much of it imposed from Westminster but embraced elsewhere in the name of 'better regulation'. This retreat from regulation is cost-cutting dressed up as a cost-benefit calculation. It transfers risks to communities and the public purse, while falsely claiming to reduce costs without adverse consequences. It is a process of cost-shifting, not cost-reduction.

The response of regulators to the pressure not to regulate businesses and the environment has not been uniform. The workplace health and safety regulator, the Westminster-controlled Health and Safety Executive (HSE), and the local authorities whose budgets are largely determined by Westminster appear to have had far less freedom to explore and determine enforcement approaches and priorities and staffing policies. Effectively they have been captured and in many respects neutralised by Westminster.

The Scottish Environment Protection Agency (SEPA) has had far more autonomy and pursued a more rigorous approach to the regulatory options open to it. This has involved substantial investigations of alternative models of regulation and some detailed analyses of the economic aspects of regulation. There has been extensive consultation on what sort of regulatory and enforcement regimes it should adopt, including sectoral unified inspections rather than fragmented uncoordinated ones.

There remain major concerns about SEPA's proposed reforms of its regulatory and enforcement role, but the transparent process the agency engaged upon has much to commend it to HSE. The UK-controlled workplace health and safety regulator has limited the scope of its consultations to a refashioning of its role to fit the deregulatory template imposed by the UK government. The language of deregulation has become embedded, and a new pairing of functions, marrying protection of life and limb with protection of the economy, has emerged. SEPA has not been unaffected, but neither has it been entirely engulfed by an approach that splits its focus between the economy and environmental health.

A workplace case study presented in the report examines the 2004 ICL/Stockline disaster in Glasgow, which with its death toll of nine was the largest single loss of life in a UK workplace tragedy since Piper Alpha. A second case history looks at the lessons from the 2012 Legionnaires' disease incident in Edinburgh, which killed three and affected over 100. These examples provide the means to investigate some of the

The image above is the site of the Stockline factory explosion, 2004

regulatory and enforcement issues in greater depth. They highlight the pitfalls of a shift to a system of regulation where increasingly threadbare and constrained regulators are rarely seen and only very occasionally heard.

We conclude there is no case for deregulation or 'better regulation' of occupational and environmental health. Scotland needs effective regulation, with properly resourced and staffed agencies that will safeguard public health better and provide businesses and communities with an equitable base for healthy, safe, economically and physically sustainable activity.

Scotland is well placed to turn the tide on the substantial negative consequences of deregulation by protecting its necessary regulatory regimes that support responsible employers and profitable businesses. This can be done by pioneering and supporting the key principles of precaution and environmental justice linked to empowered employees and strategies such as toxics use reduction. These proposed regulatory alternatives are not a luxury, but can deliver the health and economic benefits necessary if Scotland and its people are to thrive.

## **Principal lessons of this report are:**

### **Regulation is effective and not a burden**

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- Justifications for scaling back environmental and workplace health and safety enforcement agencies, including an alleged negative impact on economic development and job creation, are not based on fact. Available evidence suggests inspection and enforcement activities can stimulate innovation, have no negative and a probable positive effect on job creation, support economic activity, and reduce costs to business through sickness absence and improved performance.
- Addressing health inequalities in the workplace and environmental justice in communities will strengthen human rights in Scotland immediately, and improve public health and be cost effective in the middle and long-term. Having some form of workplace health and safety justice programme would prove beneficial along the lines of the environmental justice measures mooted for Scotland in the mid-2000s. This should be linked to improved governance and greater citizen participation in the agencies that now regulate Scotland's environmental and occupational health.
- Political changes to the functions performed by the agencies regulating occupational and environmental health and safety, often in the guise of 'better regulation', have been introduced despite overwhelming evidence there will be a high human and economic costs a result. Business-friendly and banker-friendly policies were public-hostile and delivered an economic crisis; it would be prudent not to flirt with similar 'better regulation' induced occupational and environmental catastrophes.
- A failure to support responsible regulation with effective oversight and enforcement runs the risk of catastrophic failure, with the potential for massive human, environmental, business and societal costs. Buncefield, Deepwater Horizon and other recent disasters demonstrate that the costs of single incidents can run to billions.
- Safety and environmental enforcement agencies are disregarding lessons learned from Piper Alpha and BP Grangemouth, by slipping back into a system without the resources to deliver proper oversight and at risk of 'regulatory capture' by the increasingly self-regulating companies the agencies are supposed to regulate.
- The options for change considered by enforcement agencies have been limited by the politically imposed requirement to deregulate. Cost effective and proven approaches including toxics use reduction and greater worker involvement and empowerment have not been given adequate consideration. A shift from command and control enforcement regimes to partnerships and other voluntary approaches is not supported by the evidence.

## Proper regulation pays

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- Initiatives to improve environmental and workplace health and safety typically yield savings several times the costs. Properly designed strategies to boost economic performance should be required to incorporate effective inspection and regulatory regimes as a core component of the plan.
- Environmental and safety agencies are being told to have economic development as one of their objectives, diverting them from their primary purpose. While other government departments and agencies maintain a single focus on business success and economic development, the same clarity of focus should be enjoyed by the agencies charged with protecting our health and work and in the wider community.
- All regulatory agencies responsible for occupational and environmental health and safety regulation, enforcement and standards in Scotland, including local authority environmental health departments, the Health and Safety Executive (HSE) and the Scottish Environment Protection Agency (SEPA), have been severely damaged by funding cuts and the loss of staff. To function properly, the agencies must be properly resourced and the current cuts programmes must be reversed.

## Failing to regulate comes at a price

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- There is justice deficit in the area of environmental and occupational health and safety in Scotland. Only 1 per cent of the 2,500 fatal and major workplace injuries each year result in an HSE-initiated prosecution and conviction. SEPA enforcement is falling, with the agency now taking under 300 enforcement actions a year. Criminals are not being deterred, and Scottish citizens and the environment are paying the price. Responsible businesses are being undercut by the rogues.
- A failure of governments to address health inequalities in occupational and environmental health means related risks are concentrated in certain sections of the population. Deaths related to hazards in the workplace and the wider environment are not a feature of the boardroom, they are just the consequence of decisions made there. A dramatic rise in job insecurity, marked by increases in unemployment, under-employment, enforced part-time time and temporary working, is making a bad situation worse and is a problem exacerbated by the progressive erosion of employment and welfare rights.
- Consultative processes and opportunities for 'stakeholder involvement' are being devalued and eroded, as policy priorities and pre-ordained consultations are framed within a 'better regulation' context, with a presumption inspection, enforcement and public engagement are at best secondary and non-inclusive activities.
- Data on the harm to health caused by occupational and environmental exposures are lacking. Linkages between NHS Scotland and HSE and SEPA must be improved to aid recognition and remedial action.

## Section 2

### The unfair burden of occupational and environmental ill-health

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"Once upon a time in an earlier age of austerity, the ideas of two Liberals - John Maynard Keynes and Sir William Beveridge - inspired national recovery. Governments led markets, politicians dictated to bankers and public welfare was given primacy over private corporate interests. Another Great Depression was avoided. In the current age of austerity, markets lead governments, bankers dictate to politicians and private corporate interests are given primacy over public welfare. A 'Great Contraction' appears imminent". [Simon Lee 2012].



The goal is simple enough. Create a sustainable economy, where workplaces do not damage health and the environment is protected from pollution. Hard lessons learned from the industrial smogs that choked whole communities and curtailed the lives of those downwind, and the brutal sweatshops, mines and mills that pared decades off life expectancy in the early years of the industrial revolution, led from the early 19th century to the creation of regulations and regulators to protect us all.

Today in Scotland we have an expectation that the Scottish Environment Protection Agency (SEPA) will safeguard the environment, that the Health and Safety Executive (HSE) will be watchful for health abuses at work. But, as evidence in this report identifies, this is not a battle won. Environmental pollution still damages health; hundreds of thousands suffer health damage caused by their work each year.

### **An unhealthy and unjust failure to act**

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Ill-health with its origins in poor working and living conditions is a burden on the population that is not shared equally. The lower you go down the socioeconomic scale, the larger the exposures to occupational and environmental risks and the greater the related harm. For some problems, like occupational cancer, the risk is almost entirely reserved to those in the lower half of the socioeconomic league table. It is not self-inflicted harm; it is a health inequality imposed on the disadvantaged by the advantaged, those both creating and benefiting from the risks.

According to Marmot: “While fair employment and decent work can bring economic, social and psychosocial benefits to individuals, a body of evidence shows that adverse employment and working conditions damage health and contribute to the social gradient in health. Precarious employment conditions and job insecurity are associated with poor health outcomes, including adverse effects on mental and physical health” [Marmot 2010].

He adds that “health inequalities are not a natural and immutable feature of society. Nor are health inequalities simply a matter of inequalities in access to health care, although the health care system has an important role in mitigating health inequalities. Systematic health inequalities arise from inequalities in society. Observations that the pattern of health inequalities varies between countries and within countries across time indicate that health inequalities are responsive to political, economic, social and cultural change. Since this is so, there is an ethical imperative to reduce unnecessary suffering and premature death by taking action to eliminate or at least reduce systematic health inequalities.”

In ‘Fair Society Healthy Lives’, the 2010 report of Marmot’s independent UK government-commissioned review, three of the six key policy objectives addressed directly these concerns: Create fair employment and good work for all; ensure healthy standard of living for all; create and develop healthy and sustainable places and communities; and strengthen the role and impact of ill-health prevention [Marmot 2010a].

Siergest and colleagues also raised the importance of addressing as well as recognising health inequalities with a particular emphasis on workplace health, noting: “Employment and working conditions make a significant contribution to the development of social inequalities in health in England, as is the case in all wealthy countries. They are of critical importance to improve population health and redress health inequalities in several interrelated ways... Third, adverse working conditions in terms of physical and chemical hazards, risks of injuries, long or irregular work hours, shift work and physically demanding work affect workers’ health, defining targets of occupational health and safety measures” [Siergest 2009].

We certainly know health inequalities overall exact a terrible toll in Scotland; the struggle to reduce these health inequalities has been a long one. Although significant health improvements have been achieved with regard to reduced mortality and

morbidity from a number of diseases, the health disparities remain very large. As the Scottish Government noted in 2011: "Between 2000 and 2009, CHD [coronary heart disease] mortality rates in the under 75s fell by 45 per cent in Scotland overall, but only by 36 per cent in the most deprived areas. During the same period, cancer mortality rates in the under 75s fell by 12 per cent in Scotland overall, and by 3 per cent in the most deprived areas.

"In 2000, the proportion of deaths from CHD in the 15 per cent most deprived areas was 24.6 per cent, with 20.4 per cent of deaths from cancer. By 2009, the proportion of deaths from CHD in the 15 per cent most deprived areas had fallen slightly to 24.0 per cent, and cancer deaths had fallen to 19.1 per cent" [Scottish Government 2011].

For some parts of Scotland, the gap is even larger. 'Health Inequalities in Scotland: Looking beyond the blame game', an Oxfam policy paper published in June 2011, noted "for example, male life expectancy in certain more disadvantaged areas in Scotland can be as low as 61 years old. Health inequalities arise because of political decisions and processes and because of this it is essential to campaign for a narrowing in the power, income and wealth gaps that cause them."

The report noted "the stark health inequalities can be illustrated by observing the drop in life expectancy of 2.0 years for males and 1.2 years for females for each station as you travel east on the railway across Glasgow, between Jordanhill and Bridgeton" [McCartney and Collins, 2011]. Work environments and wider environments form part of the mix in which health inequalities continue to flourish.

It is difficult to determine accurately the toll taken by deaths and disease in the work environment and even harder to assess the morbidity and mortality due to wider environmental exposures – through air, water, soil and food pollution and contamination. There is a general acknowledgement, though, that such figures are significant. They impact on public health and often reflect both the major health inequalities and environmental injustices that exist across Scotland.

The problem has been acknowledged by the Scottish government in the 2008 'Equally well' implementation plan, but this did not develop a functional strategy to address occupational and environmental health inequalities [Scottish government, 2008]. HSE does not address health inequalities directly anywhere and never has; and SEPA has apparently dropped action on health inequalities from its plan. These are seriously damaging omissions.

Recessionary pressures twinned with an erosion of employment rights mean work is becoming more precarious, and this is making a bad situation worse. "The majority of the world's workforce is informal and is in an extremely precarious position," the 2008 report of a World Health Organisation (WHO) commission on social determinants of health observed. It noted: "The global dominance of precarious work, with its associated insecurities, has contributed significantly to poor health and health inequities" [WHO 2008]. It is a problem encountered across the UK, as the pressures of unemployment are compounded by soaring under-employment and temporary employment. In a recession-ravaged economy, even if you've got a permanent job, you feel insecure. If you've got a temporary job, you are permanently insecure [Hazards 2012].

Health problems related to the jobs we do, the circumstances we live in and the living environment surrounding us present a major public health problem and a serious future threat that damages people, communities and businesses, both in human and economic terms. The critical issue is how, if at all, can this harm be reduced and controlled? What role should regulation and inspection play in that control and what are the most effective regulatory regimes? The responses to these questions run a broad spectrum: from letting the free play of market forces resolve the issues to prescriptive regulation.

The evidence that supports these approaches requires rigorous testing. Often the evidence is poor or absent. Nonetheless, an assumption of supporting evidence and efficacy is driving a move towards deregulation and 'better regulation' in the UK, with cuts in both staff and resources available to enforcement agencies and attacks on and

removal of laws regulating a range of public health and related areas. It is a case of policy-based evidence, leading to flawed policy or politically driven policy making, rather than the claimed evidence-based policy [Marmot 2004].

One global estimate of diseases related to global environmental pollution suggests it contributes about 8-9 per cent of the total disease burden, with the percentage much higher in developing countries [Briggs 2003:1]. But this is not a problem restricted to developing countries; global evaluations often under-estimate air pollution-related mortality and morbidity in the mature, ostensibly better regulated, wealthier economies.

The International Agency for Research on Cancer estimate 7 to 19 per cent of all cancers worldwide are due to toxic environmental exposures. These include both work environments and wider environments [WHO 2009; Straif 2008]. Whatever the exact figure, the toll from these environmental diseases in Scotland will add up to a significant public health problem [Watterson 2012].

Obtaining comprehensive data on pollution that threatens health in Scotland is challenging as it is spread across many sources and a lack of staff, time and resources to extract and collate it often exists. High level environmental data sets are available but there is nothing comparable to and as accessible as the Scottish Observatory on Public Health statistics on health inequalities linked to intermediate health zones. It also appears that such data are not used by regulatory agencies in assessing the impact that projects with pollution potential will have on vulnerable communities" [Scottish Government environment statistics; ScotPHO, 2010].

Health Protection Scotland does not produce estimates of deaths and disease attributable to environmental pollution. It rightly considers this is a highly problematic and error prone area [personal communication with Health Protection Scotland 10 August 2012]. However, data are produced at local level across the NHS Boards for specific disease groups such as cardiovascular disease and respiratory disease that may be linked to environmental factors. In England, there are estimates of childhood asthmas dues to environmental exposures and more recently UK estimates of morbidity and mortality due to air pollution have been produced. The picture though, in the UK in general and in Scotland, is incomplete.

Uncertainty is one of the problems encountered when formulating policies that address environmental health. In public health, lack of data as well as data indicating potential problems should trigger precautionary policies [EEA 2001]. In practice, it often appears to produce no policies at all and waits until the horses have bolted from open doors.

In Scotland, this may be because environmental enforcement activity has little connection to the human consequences of a failure to enforce. SEPA has no one at the top level of the organisation identified as having a specific role related to human health and the environment, although many staff will address more general threats of pollution to human health in the agency through monitoring [SEPA top level organogram, accessed 17 September 2012].

### **When you don't count the bodies, the bodies don't count**

The statistics on work and health are better, but still incomplete and prone to under-estimate the scale of the problem. There is evidence that around 20 per cent of the UK's biggest killers, including heart disease, cancer and chronic respiratory disease, are caused or related to work, suggesting annual work-related disease deaths exceed 50,000, with the working wounded totalling several million [Hazards 92, 2005]. The Health and Safety Executive (HSE) puts the figure at 12,000 deaths a year, but in doing so dismisses almost all work-related causes of death except occupational cancers and chronic obstructive pulmonary disease [HSE 2012]. Even these two causes are given at patently suppressed levels that have been discredited [Hazards 117, 2012].

Statistics released by HSE on 5 July 2012 gave a provisional figure for the number of workers fatally injured in 2011/12 of 173, corresponding to a rate of fatal injury of 0.6

deaths per 100 000 workers [HSE, 2012]. The equivalent figure for Scotland in 2011/12 was 20 fatalities, up from 14 the previous year. The fatality rate was 0.8 deaths per 100,000 workers.

An estimated 1.2 million people in Great Britain who worked in 2010/11 reported suffering from a work-related illness, of which 495,000 were new cases which started in the year (LFS). The figures note 26.4 million working days were lost due to work-related illness and workplace injury. According to HSE, the comparable figure for Scotland is 2.1 million working days lost due to workplace injury and ill health, an average of 1.1 days per worker [HSE 2012].

This amounts to approaching a quarter of all sickness absence, a sizeable and particularly preventable slice of the total sick leave toll. Office of National Statistics figures released in April 2012 revealed the percentage of hours lost to sickness absence in Scotland in 2010/11 was 2.1 per cent, higher than the UK average of 1.8 per cent and trailing only the north-east of England and Wales [ONS 2012].

The economic costs of occupational disease mortality and morbidity in Scotland run into tens of millions of pounds as do the costs of injuries and far outweigh equivalent costs from road traffic fatalities, murders and suicides combined [Watterson 2006; Watterson 2008]. Our focus within this report is on the regulation of occupational and environmental health and safety in Scotland.

Integrated, effective and efficient regulation that protects people and businesses is a laudable objective: similar to being for goodness and against sin. No one supports unnecessary, overly bureaucratic or ineffective regulations in the environmental or occupational health fields. This wastes resources and staff time for both regulators and businesses. However, we are unaware of any examples of agencies in the public health field that engage in anything other than minimal inspection and enforcement activities, even where these involve egregious criminal offences.

In workplace health and safety for example, fewer than 1-in-170 of the fatal and major injuries recorded by HSE resulted in prosecution activity in 2010/11, the most recent year for which finalised figures are available. Only 1-in-65 resulted in any enforcement action at all, down by 30 per cent [Hazards 119, 2012]. In Scotland, HSE action led to just 33 convictions, in a country which over the last five years has seen around 2,500 fatal and major injuries each year [HSE 2012].

The Royal Environmental Health Institute of Scotland (REHIS) reports there is no central source of statistics for Scottish local authority environmental health department inspections and enforcement. This is in part because of cuts so each local authority no longer produces a separate annual report [personal communication with REHIS, 21 August 2012].

Lacking the resources to monitor and report accurately on national environmental health across Scotland provides those advocating deregulation with the means to argue their case. However, an absence of evidence in this context is not evidence of absence of environmental health threats as recent outbreaks of Legionnaires' disease [Hazards 119, 2012] and E Coli have demonstrated with lethal consequences [SLWG 2009].

The 'old' public health issues of water and food quality, poor housing and air pollution not only continue in Scotland but present the greatest threat to deprived communities that already reveal many health inequalities. These are strong reasons not only for maintaining environmental regulations but also for ensuring there are sufficient environmental health staff and resources to enforce them.

The reality is that official oversight of workplace and environmental health standards is minimal, contrary to both media reports and statements from politicians [Hazards 118, 2012]. The theory goes that the UK has become risk averse, hampering personal and business development with pettifogging red tape [HSE mythbusters webpage; UK government Red Tape Challenge webpages].

The UK government-preferred policy alternative, though, is based on a system of risk



tolerance, with the rogue firms committing criminal safety offences allowed to do so free from scrutiny and usually without consequences. Preventive measures like reducing our exposures our toxins or allowing communities and workers an informed and empowered role are absent from the plan. A large global paper tiger of 'unnecessary and burdensome regulation' appears to have been created that lacks any credibility when subjected to careful scrutiny. What such a tiger does do is to provide shaky ideological foundations for deregulatory policies.

In 2002, BP became the first British company to receive a £1m safety fine relating to an explosion at the Grangemouth refinery. At the time, the UK Health and Safety Executive (HSE), which launched an investigation in tandem with SEPA, acknowledged: "The court has confirmed, by the high fine imposed today, that BP must employ the highest standards of management of safety, health and environment to prevent major incidents. Only good fortune avoided fatalities and serious injuries." HSE noted: "In addition to today's fine, the cost to BP of these incidents has been substantial - in monetary terms lost production, cleanup costs and rebuild costs - not to mention the effect on the company's reputation in the local community and beyond". HSE further noted: "Employers are legally required to properly manage safety, health and environment. This also makes good business sense, is cost effective and demonstrates corporate social responsibility." [HSE/SEPA, 2003]

### Section 3

#### The political attack on regulations that save lives and money

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Regulatory agencies across the UK, including Scotland, face many challenges. Undoubtedly they contain dedicated and able staff committed to protecting the public. However, many inspectors report significant demoralisation because of staffing and resources cuts that severely hamper their capacity to work effectively.

The cost-cutting, rule-slashing, role eroding deregulatory policy fuelling their concerns has been taken up at the top of the UK government, with high profile contributions from both the prime minister and deputy prime minister. Deputy prime minister Nick Clegg told a business conference on 25 October 2011 that "there will be a major shake-up of business inspection - going through the regulators, asking 'are they still necessary?'; 'Should they still exist?'; making sure that, yes, they intervene when necessary, they offer advice and support, but otherwise they let you get on with it." [Office of the Deputy Prime Minister, 2011].

The leaders of regulatory agencies are faced with the unenviable task of working with reduced budgets whilst trying to maintain standards and services during a period of economic retrenchment. The impact of UK government cuts on all UK agencies has been considerable and has also affected local inspection. However, prior to the current economic crisis, governments were directing agencies towards deregulatory policies that reflected ideological rather than economic priorities.

Several agencies have willingly continued down the 'better regulation' route. This raises the ethical question of the point at which scientists and civil servants, employed in agencies starved of resources and steered away from their regulatory role, can any longer execute their professional duties.

#### Losing control in Scotland

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The Scottish administration and budget holders have limited control over some regulators, with HSE the standout agency controlled from London. The environmental health departments in local authorities, dealing with both workplace health and safety in certain workplaces and environmental health, are also hamstrung by UK budget cuts and sweeping policy edicts.

Concerns about reductions in local authority enforcement activity and cover raised by the Scottish government, Scottish local authorities and environmental health professions in Scotland were ignored by the UK government, with Scotland now largely operating to a London-fashioned, imposed and creeping hands-off enforcement model.

An instruction to cut inspections by UK regulatory agencies by a third was forced on local authorities, including those in Scotland, despite explicit concerns raised by the Scottish government that local government activity is devolved and consultation should have first taken place with the Convention of Scottish Local Authorities (COSLA). The UK government's approach would not have been endorsed by COSLA.

Commenting on the UK government's March 2011 health and safety strategy in its evidence to the House of Commons Scottish Affairs Committee hearings on health and safety in Scotland, COSLA said: "Scottish local authorities have serious concerns about the planned reforms announced by the Department of Work and Pensions in March 2011 and their potential impact on Health and Safety in Scotland. These include the proposed reduction in pro-active inspections and introduction of cost recovery... In summary, the planned changes risk lower health and safety outcomes in local communities, the loss of the positive relationships that have been developed between local authorities and local businesses and are likely to increase the risk of non-compliance" [House of Commons SAC, 2011].

The Society of Chief Officers of Environmental Health in Scotland (SOCOEH) also told the committee there was "concern that a reduction of direct health and safety interventions may result in lower health and safety outcomes in local communities and some loss of the positive relationships that have been developed between local authorities and their local businesses. Occupational health and safety enforcement whether by HSE or local authorities is an important contributor to local community safety, well-being and public health outcomes" [House of Commons SAC, 2011].

The Scottish Government has funded the Scottish Centre for Healthy Working Lives. However this has a primarily health promotion rather than occupational health and safety function, has taken funds away from mainstream occupational health and safety activity and has yet to be fully evaluated [Watterson 2008]. The Scottish administration has a more obvious contribution to make on the environment, with devolved responsibility for the operation, priorities and finances of SEPA. It could, if it wished, ensure effective and properly resourced regulation of environmental pollution through SEPA. But rather than putting its stamp on its own regulatory model, it appears to be embracing policies generated by London's coalition government.

Whether the purse strings are controlled in Westminster or Holyrood, the new UK government imposed orthodoxy declares regulation a burden on business and deregulation an economic necessity. This is not only damaging to the enforcement function of regulators, it is also untrue. It ignores entirely the purpose of environmental and workplace safety laws and their enforcement – to protect the population and the wider environment - and the human and societal costs of an absence of effective regulation. The retreat from regulation is cost-cutting dressed up as a cost-benefit calculation. It transfers risks to communities and the public purse, while falsely claiming to reduce costs without adverse consequences. It is a process of cost-shifting, not cost-reduction.

The current Westminster government has continued and accelerated the long-term retreat from workplace and environmental regulation, with major departments like the Cabinet Office and business and industry, in its current form as the Department for Business, Innovation and Skills (BIS) and previous guise as the Department for Business, Enterprise and Regulatory Reform (BERR), imposing a cross-department

drive for lighter, softer and less 'burdensome' inspection and enforcement regimes.

The UK's two biggest regulators, the Environment Agency and the Health and Safety Executive, were front and centre in the deregulatory crosshairs, with brutal funding cuts and staffing reductions reinforcing the message that enforcement activities were no longer to be a priority. The hands-off approach has spread across local authority enforcement and would have appeared to have contaminated even devolved functions and agencies, like SEPA.

### **Deregulation by another name**

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Deregulatory policies come in many forms and with several names. These include better regulation, smart regulation, soft regulation, business-friendly regulation and, more sophisticated, responsive regulation. The latter flows from the 1990s and especially the work of Ayres and Braithwaite. As Tombs and Whyte (in press), however, observe: "Specifically we argue that policy developments compatible with the concept of responsive regulation can allow a 'deregulatory' enforcement practice to gather momentum. The key mechanisms through which such a process can occur are the policy and practice of risk-based enforcement - the door to which is significantly opened by Ayres and Braithwaite's concept of responsive regulation."

Indeed proponents of 'better regulation' and responsive regulation may incidentally acknowledge the lack of evidence for their advocacy of such an approach. Again our two colleagues, Tombs and Whyte, have identified an absence of supporting evidence some leading advocates of deregulatory policy themselves acknowledge, for example Grabosky and Shover.

They note: "There is currently a remarkably optimistic consensus in some academic quarters about how to reduce the harm caused by privileged predators. The heart of it lies in the presumed promise of pluralistic, cooperative approaches, and responsive regulation. These assumptions highlight the need for enhanced prevention, more diverse and more effective internal oversight and self-monitoring, and more efficient and effective external oversight. They have gained use throughout a variety of regulatory realms, many since their earliest, albeit embryonic, formulation nearly three decades ago... They make sense theoretically, and we endorse them. We do so not because they have a record of demonstrable success but principally because sole or excessive reliance on state oversight and threat of criminal prosecution is difficult, costly, and uncertain. Still, we are mindful, as others should be that the onset of the Great Recession occurred during and despite the tight embrace of self-regulation, pluralistic oversight, and notions of self-regulating markets by policy makers and many academicians [Shover and Grabosky 2010, 641-42]."

Self-regulation is a misnomer. The 'self' here does not include the worker or local resident or the communities and state-funded services that will bear much of the burden where the trust bestowed on the self-regulated is undeserved and harm is caused. It is 'business regulation', by business and reflecting the concerns of business. These do not necessarily coincide with those of the wider community, certainly in the short-term, with business priorities set at annual general meetings, where the most important measure for shareholders – at least until disaster strikes - is the bottom line. Today's bad decisions have much longer-term implications for the workers and the wider community.

The approach is informed by an often uncritical assumption that the self-regulating, businesses, are uniformly honest players. We would argue that state oversight of public health is necessary. It is a necessity borne out by a long sequence of epidemics and endemics, not only of infectious diseases but also for example respiratory diseases, adverse reproductive effects and cancers in communities and workplaces.

The problem is not limited to rogue businesses, breaching environmental and workplace standards to secure competitive advantage, although this is certainly a factor. The respectable face of business – including the Confederation of British Industry [CBI

news release, 11 September 2012], the British Chambers of Commerce (BCC) [BCC news release, 10 September 2012], and the Forum of Private Business (FPB) [FPB news release, 10 September 2012] – has opposed safety regulation and has declared it a burden without providing credible supporting evidence. In the case of BCC, it has not only skewed the statistics in its drive for safety deregulation– figures subsequently repeated unqualified by ministers to justify their deregulation plans - it has misrepresented the views of its members too.

The news release on a May 2011 BCC survey report was headlined: 'Half of businesses tied up in health and safety "yellow tape".' It put the costs of workplace safety regulations at £355m a year. But BCC's survey in fact found the majority of the 5,928 employers questioned – 53 per cent - did not find workplace safety regulations significantly burdensome and one in five didn't find them burdensome at all [Hazards 115, 2011]. Neither did the BCC report, 'Health and safety: a risky business?', make clear its cost calculation discounted entirely the far more substantial cash benefits of safety regulation [Hazards 113, 2011].

Compared to the multi-billion annual cost of occupational injuries and diseases, many deadly, protective health and safety laws are really no burden. Only a minute proportion of cases of occupational injury or disease result either in compensation for the victim or the prosecution of an employer. In monetary terms, employers get off lightly. In human terms, employers just do not suffer at all [Hazards 106, 2009].

The business lobby can even make a science of obstructing regulation [Sass 2011]. In the US, a succession of environmental and safety measures affecting highly dangerous substances including beryllium [Watterson 2005, SKAPP], diesel exhaust [McClennan 2012] and manganese, have been frustrated by business backed research with the intention of 'manufacturing doubt' [Michaels 2008]. This has a knock on effect for the UK, which does not have a substantial publicly funded environmental or workplace health and safety research base of its own. When the US industry lobby causes legislative paralysis by analysis, hopes of tighter standards in the UK stall too.

### **Giving bad businesses a break**

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Bad business can afford to be bad because they realise someone else will pick up most of the economic and human costs, something known to enforcement agencies. A 2008 analysis by the UK Health and Safety Executive (HSE) concluded: "Although the costs of workplace injuries and work-related ill health are attributable to the activities of the business... the bulk of these costs fell 'externally' on individuals and society" [HSE 2008]. A 2011 HSE paper reinforced the message, with over 60 per cent of the bill falling on individuals and less than 20 per cent falling on employers [Hazards 113, HSE 2011].

But enforcement agencies are responding to the UK government agenda and so far have exhibited little desire to challenge a dramatic reduction in their resources and have accepted operating with their hands tied. SEPA, free from UK government control, seems incapable at this time of finding a different, independent, path.

As the enforcement agencies capitulate, they fall compliant victims to deregulatory drives with covert as well as overt mechanisms and impacts. Overtly, they lead to the removal of regulations, a removal of oversight and use of voluntary protection programmes and voluntary self-regulation. They sunset regulations dealing with hazards rather than sunset the hazards. Covertly, they engender a 'business friendly' tone that directs enforcement staff in a particular direction and informs businesses that adherence to safety and environmental standards is not something they should view with the same priority any more.

The message of this governmental strategy is amplified by under-resourcing and under-staffing of regulators leading sometimes to fatal weakening in the agencies. Administrations keen to see these practices become entrenched may even fund narrow research to delay and limit action on deregulatory impacts [Chen and Osman 2012].



The agencies themselves can become infected by what gives the appearance of deregulation fever, increasingly self-limiting their role to non-statutory activities while defending poor and poorly enforced standards. Dusty industries, for example, have been able to rely on HSE to lead resistance to a tighter general dust standard at work, despite acknowledging the many thousands who suffer from chronic lung disease, and some develop fatal cancers, as a result of these exposures [Hazards 116, 2011]. Both unions and the Institute of Occupational Medicine (IOM) have warned the dust standard is 'unsafe', results in at least hundreds of additional preventable deaths each year [IOM 2011], and should be reduced to a quarter the current level.

Great emphasis is placed by ideologues on the waste of time and resources by business in fulfilling irrelevant and outdated rules and regulations. This is simply not demonstrated for health and safety in the policy documents offered [HM Government 2010]. Whether a public agency in the past really wasted time and resources in pursuing meaningless legislative targets and inspecting and monitoring businesses where no serious threats to the environment and health existed is not proven.

No compelling evidence is provided to support the argument, and none is obvious in the literature. It is unlikely the business lobby would have remained silent about unwarranted regulatory interference. There has never been a golden era when environmental and workplace safety enforcement agencies had unlimited budgets and resources. These agencies have always had to prioritise and it is unlikely pointless and unproductive enforcement of unnecessary rules and regulations would have reached any 'to do' list at any time.

It is critical that any proposed changes in regulatory rules and practice are contextualised. It is dangerous to decouple policies from structures and the resources needed to implement them. Often agencies propose deregulation but fail to discuss alternative approaches to 'better regulation' and the economic advantages of regulation to human health [Giacomello et al 2006].

It is this 'better regulation' approach that continues to set the context in which occupational and environmental enforcement regimes are redefined. For better, read less regulation and less enforcement – and, we argue, a greater freedom to pollute and maim with impunity and sometimes legal immunity.

In this report we look at the consequences of cuts to occupational and environmental health and safety enforcement activities, and alternative approaches with better, more cost-effective outcomes for the public health and the public purse.

## Section 4

### Making things worse with 'better regulation'

'Better regulation' cannot be a bad thing, but good language does not necessarily coincide with good intentions. Nonetheless, it is an approach embraced by organisations of considerably different political complexions. David Cameron's 'Red Tape Challenge' claims "regulations – and the inspections and bureaucracy that go with them – have piled up and up. This has hurt business, doing real damage to our economy" [Red Tape Challenge website, accessed 12 September 2012].

The Scottish Government's 'better regulation' webpages, meanwhile, come as a subheading under a 'Business support' section on its website, and note: "Scottish Government's Better Regulation agenda aims to support the Economic Purpose (to focus Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth) and all the related elements of the National Performance Framework" [Better Regulation webpages, accessed 12 September 2012]. Better regulation, in the guise of 'innovative regulatory practices', featured in the current Scottish government's 2011 election manifesto but precisely what it meant was not explained and what the costs and

benefits of such a policy were remains unaddressed [SNP, 2011].

There is rarely a critique offered of the failures of 'better regulation', although the myths surrounding health and safety regulation and intrusion have long been challenged (Bartle and Vass 2008). The unifying purpose of better regulation approaches seems to be a concern for the welfare of business, when many of the regulatory functions targeted were introduced, like the Gangmasters Licensing Act and Clean Air Acts, to combat undeniable and sometimes deadly abuses of the workforce and the wider environment by business itself.

Even less critical attention is given to the political context underpinning the clamour for better regulation. It is ideological on the part of a Cameron government wedded to the idea of deregulation rather than better regulation, and determined to proceed regardless of the evidence. There is no reasoned argument for the approach, other than the political benefit it reaps among its core supporters as well as in the more regulation averse boardrooms [Hazards 118]. For others, like the British Chambers of Commerce, it is a pursuit of fewer safety rules justified with the use of a partial and deliberately misleading presentation of the costs.

Evidence increasingly shows deregulation is a flawed and failed ideology. There is no information offered in the UK on the infrastructure requirements and audit and assessment mechanism of the new policies. The people, processes and procedures available will be major factors in the success and failures of any regulatory system. This information currently appears to be lacking and greatly limits the means to assess proposed changes.

The position of staff who face cuts in both numbers of inspectors and resources to monitor effectively are rarely mentioned in 'better regulation' proposals. Yet it is difficult to understand exactly how cutting staff and resources will ensure effective and timeous inspections that protect public health and help businesses.

### **When 'better' really means 'business'**

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The better regulation policy agenda emerged strongly in the 1970s and 1980s and was driven in Europe by neo-liberal ideology and laissez-faire thinking that seriously misconstrued the humanitarian elements of the thinking of the philosopher Adam Smith, on whose writings such policies were apparently based [Boyfield, 2009]. Nowhere in the public health field was the case for 'better regulation' properly evidenced.

The Dutch and British prime ministers pressed for reductions in regulation and voluntary approaches. Blair and Brown continued pressing the approach supported by the Brown-Commissioned Hampton Report. In 2007 prime minister Blair told the new Department for Business, Enterprise and Regulatory Reform "to cut regulation across government, and inculcate a new approach to risk in public policy."

John Hutton, the business secretary at the time, outlined to MPs "a wide-ranging plan for implementing assorted ministerial pledges, including a 25 per cent cut in the administrative burden imposed by government departments" [Financial Times, 24 July 2007]. Deregulation and softening attitudes to risk were central planks of government policy and remain strong drivers across the UK for regulators and politicians alike.

It is a curious feature of this deregulation debate that it has centred entirely on costs, and not on benefits. Never in the justifications for deregulation has there been an attempt by government to demonstrate that the already advanced trudge down the deregulatory path has improved safety outcomes. They cannot, because it does not.

Nor is much attention paid to the fact that the law was not necessarily that onerous in the first place. UK workplace safety law has, for example, had a built self-limiting clause from 1975, when the Health and Safety at Work etc Act 1974 placed a 'so far as is reasonably practicable' escape clause front and centre. Absolute duties largely disappeared from the statute book, to be replaced by a system that allows businesses and the regulator to make cost-benefit decisions on whether there is any need to take

preventive health and safety measures.

Instead of absolute or the more usual heavily qualified duties, deregulatory ideologies argue for regulatory impact assessments and 'proportionality'. They combine this with a call for reduced risk aversion and an increased role for insurance companies in inspection [see for example Boyfield 2009]. Yet little evidence is provided to justify such arguments, whereas history is littered with the failures of voluntary control systems.

In Europe, 'better regulation' trumps other concerns in the formulation of legislation, with the European Commission using audit companies and consultancies to make their case. As Vogel observed, the Commission has an "inordinate reliance on the work of a group of experts appointed to support the 'Better Regulation' programme. Most of the group - known as the Stoiber Group after its chairman, the former conservative premier of Bavaria - are highly pro-deregulationist... In addition to his job of advising the Commission, Mr Stoiber has since 11 November 2009, been Chairman of the Advisory Board of Deloitte, one of the firms involved in carrying out the (audits) concerned" [Vogel and Van Den Abeele 2010].

'Europe can do better', a November 2011 report of the European Commission 'high level group' chaired by Stoiber, makes recommendations on measures to "firmly integrate smart regulation principles into the legislative process." These include "the use of risk-based approaches "and a recommendation "that Member States keep introducing new sets of quantitative targets, in order to keep up momentum for reducing burdens on businesses, and to make life as easy and predictable as possible for businesses" [European Commission 2011].

Yet the European programme has failed. Commentators note that not only was it unable to prevent the European economic crisis but its deregulatory policies contributed to the financial crisis. A survey completed in the Netherlands, which pioneered 'better regulation' found that 70 per cent of Dutch business leaders had felt no benefit from better regulation [Van den Abeele 2010:73].

### **The fatal flaws of deregulation**

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Van den Abeele cites European data that assessed the costs of regulation on the UK economy as 2.4 per cent of the GDP in 2003/4. No figure was calculated for the benefits of regulation in protecting public health although, significantly, HSE has undertaken these calculations. Figures published by HSE in 2011 put the cost of work-related ill-health and injuries alone at over 1 per cent of GDP [HSE 2011], and an earlier estimate put the figure at up to 3.1 per cent [HSE 2007].

These figures are known to underestimate the real cost. They are certainly fair weather calculations. 'Black swans', those low probability but high consequence industrial catastrophes that stubbornly continue to occur, can add percentage points to the safety and environmental bill virtually overnight.

BP's April 2010 disaster in the Gulf of Mexico, which claimed 11 lives and caused widespread environmental pollution in the region, was estimated to have cost the company \$8.8bn by the end of June 2012. Announcing its quarterly results in July 2012, BP said it had set aside \$38.4bn to meet the estimated costs [BP second quarter results 2012, 28 July 2012 and related statement]. In the UK, the Buncefield oil depot explosion and fire in 2005 came with a total bill in the region of £1bn [Buncefield report, 2008].

#### **Enforcement shift risks a dangerous leap back to the future**

'Safety failures the offshore oil industry: from Piper Alpha to Deepwater Horizon', a report of a study by Linköping University Professor Charles Woolfson to be published in 2013, provides a siren warning about the UK's current anti-regulatory, business-friendly trajectory [Linköping University, 2012].

Woolfson, a former professor of labour sociology at Glasgow University, found

in the run-up to the April 2010 Deepwater Horizon blast – the offshore rig disaster that killed 11, polluted the Gulf of Mexico with oil and costs BP billions - the shrinking number of inspectors lacked sufficient training, and became more and more dependent on the expertise and information of the oil companies, a form of 'regulatory capture' corroborated in 2011 by a President Obama commissioned independent commission [Bureau of Ocean Energy Management, Regulation and Enforcement news release and final report]. The commission's report called for more unannounced safety inspections.

The same weaknesses were pointed out after the 1988 Piper Alpha disaster that killed 167 offshore workers off Scotland's coast. According to Woolfson, industry's promises on self-regulation, voluntary enforcement and standards of conduct effectively torpedoed all demands for stricter supervision of safety arrangements. Increasingly threadbare UK enforcement agencies, pressed into increasingly hands-off self-regulatory approaches, risk revisiting past and deadly mistakes.

The major companies implicated in the Deepwater Horizon disaster of 2010, notably BP and Transocean, have global health and safety policies and approaches and operate today in Scottish waters.

The case of BP and the Deepwater Horizon explosion, which seriously damaged the company's name, share price and profit sheet as well as causing deadly harm to workers and the environment, is salutary - regulators who do not regulate effectively can be implicated in the most devastating disasters. The Chemical Safety Board's investigation did not allot all the blame to BP, but said the oil companies, trade associations and regulators were all culpable and were concentrating on day-to-day problems whilst ignoring the potential for catastrophic process management failures.

At board level, companies frequently have contradictory policies, with rationalisations and cost-cutting drives running counter to and trumping parallel environmental and safety commitments. This was certainly shown to be the case in reports on the 2005 BP Texas City explosion and the 2010 BP Deepwater Horizon disaster, both of which led to substantial loss of life and environmental damage. Local managers will make decisions a long way from the corporate HQ, and will be judged primarily on how well they achieve economic performance targets, not how closely they adhere to environmental permits or paper safety cases.

There is a remarkable resistance to learn, or at least remember long-term, the lessons of industrial catastrophes. A 2010 report in Hazards magazine described the process. "In between disasters, governments love business-friendly talk of health and safety deregulation. Only when faced with a Deepwater Horizon blast or a Stockline explosion, when the deaths come in a rush and occupational health and safety is in the media glare, is common sense briefly restored and talk of responsible inspection and enforcement regimes preferred to blind trust. It amounts to criminal irresponsibility, because the evidence shows that responsible enforcement trumps blind trust all the time, not just when the media is showing an interest" [Hazards 112, 2010].

Evaluations of alternatives to regulation including voluntary protection programmes (VPPs) and self-regulatory and earned autonomy schemes, often advocated by business and lobby groups, show they have failed [GAO 2009]. Claims have been made that self-regulation, beyond supposedly lowering regulatory 'burdens', is more flexible and adaptable and lead to more commitment and pride in the business and shows markets work better [Bartle and Vass 2005:2]. These claims do not stand up to scrutiny when injuries, illnesses and pollution are considered. Regulations that rely on incentives rather than command and control strategies have also been widely advocated but within the public health field have proved remarkably ineffective.

Voluntary schemes tried in the UK have failed spectacularly. In 2010 alone, three of HSE's much vaunted voluntary schemes - the Institute of Directors/Health and Safety



Executive (HSE) directors' leadership guidance [HSE 2010], HSE's Corporate Health and Safety Performance Index (CHaSPI) [HSE 2010] and the HSE-backed Asbestos Building Inspectors Certification Scheme [BOHS 2010] - were all revealed to be an expensive waste of time [Hazards 112, 2010].

The application in high risk industries such as the offshore sector of 'safety case' systems, a cosmetic and particularly paper-heavy version of self-regulation, has also been challenged. University of Maryland law professor Rena Steinzor, commenting on suggestions after the Deepwater Horizon disaster the US should adopt a UK-style safety case system warned against the use of the "wrong-headed" approach. She noted: "Secret plans, as the safety cases are, have no place in the American regulatory system; compliance documents should be transparent and available to the public and to overseers who can hold them accountable." [CPR 2011].

The process of deregulation costs money too, a missing dimension of the debate. According to a recent figure provided by the UK Government under a Freedom of Information request, "the government is spending more than £10 million annually on efforts to 'ease the regulatory burden on business' [Environmental Health News 2012]. In examining financial crises and corporate crime, two explanations among many have been offered that should be considered to explain failures. These are 'wilful ignorance' and 'normalization of deviance'. As we track through our analysis of environmental and occupational health and safety regulation with reference to the Scottish position, these explanations will be tested. They may apply to regulators as much as to dysfunctional businesses.

## Section 5

### Regulation not only works, it pays

#### **The price of soft and deregulatory practices**

The BP Deepwater Horizon and Texas City disasters are case histories in the folly of a regulatory light touch both businesses and enforcement agencies would be wise to remember. By the end of the second quarter of 2012, BP had paid out 8.8 billion dollars in individual, business claims and government payments relating to the Deepwater Horizon incident. The cash balances in the Trust and the Qualified Settlement Funds at June 30, 2012 were 10.1 billion dollars, with 17.9 billion dollars contributed in and 7.8 billion dollars disbursed [BP second quarter results 2012, 28 July 2012 and related statement].

The catastrophic Buncefield explosion also serves to illustrate the very thin line that exists between devastation and human disaster when regulators lose touch with effective hazard regulation and inspection. The final report of the official investigation into the 2005 blast noted: "The estimate of total quantifiable costs arising from the Buncefield incident comes close to £1 billion." It noted this "does not include a specific sum for site rebuilding costs" [Buncefield report, 2008].

The debate about deregulation of workplace and environmental health and safety is for a large part an exercise in justifying solutions to non-existent problems. Even advocates of a command-and-control structure, with well-resourced inspectorates enabled by meaningful laws, enforcement powers and the inclination to use them, frequently argue the burdens on business are real but can be justified in the context of wider human and economic and societal costs.

But many laws and their enforcement may not impose a burden at all, and may in fact confer significant business advantages. International research has shown how the costs of regulation are exaggerated and their benefits constantly under-played [Shapiro

2011]. Regulatory impact assessments from Europe to North America have demonstrated the benefits of regulation of both the environment and work in health terms and economic terms. For example the EU, using a regulatory impact assessment on REACH in 2003 assessed the benefits for health as well as the costs for industry and the future Chemicals Agency of the proposed Regulation. Total costs were estimated between €2.8 and 5.2 billion over 11 and 15 years respectively. Health benefits were estimated in the order of magnitude of €50 billion over the next 30 years.

This figure was based on an illustrative scenario which had been developed with the support of recognised international organisations such as the World Bank and World Health Organisation. The additional benefits to the environment were expected to be significant but were not quantified [European Commission 2003].

Ministers, framing their arguments around concerns for job creation and stimulating economic activity, have presented safety and environmental laws as 'job killers'. There is not the evidence to support this. The evidence if anything suggests the reverse.

The jobs rhetoric has been challenged directly by the head of HSE's US equivalent, OSHA, but HSE has continued to do its government's bidding [Hazards 113, 2011]. It is not just that HSE obeyed the government's command – it did it in an extremely partial fashion. An official 2011 consultation undertaken by HSE, based on a government call for downgrading of the RIDDOR injury reporting requirements, included an impact assessment that excluded any impact on safety or on the burden borne by families, the community and the public purse [HSE 2012].

The paper's impact assessment on the "policy objectives and the intended effects" of the proposals said they were: "To improve the effectiveness of the reporting of workplace accidents by reducing unnecessary burdens on business while still maintaining standards of compliance which should help to contribute towards the overall effectiveness of Great Britain's occupational health and safety system."

The assessment, which ignored potential human and societal costs of weakening the reporting requirements, notes: "There would be a cost saving to business resulting from less time spent reporting RIDDOR injuries of £220,000 per year. There would be cost savings to both HSE and LAs from reduced resource processing RIDDOR reports of £350,000 a year. Finally, there would be a cost saving to HSE from reduced charges of gathering reports of £120,000 a year." A deregulatory measure, which at a stroke lops an estimated 30,000 injuries a year off the official work injury toll and loses the workplace intelligence that this information would have generated, was pressed through when even the business lobby admitted it would deliver an annual saving to firms averaging just £0.05 [BCC news release, 5 April 2012; Hazards 118, 2012].

The economic benefits of environmental regulation are likewise dismissed when the regulations and their enforcement are targeted for the better regulation treatment. Aside from the substantial health benefits of reducing pollution, there can be an enormous saving for the public purse. A UK government evaluation of the impact of air quality improvement initiatives in the road transport and electricity generating sectors concluded they were "very cost beneficial, with benefits estimated to have exceeded costs by up to a factor of 24." It noted that overall, the financial benefits of air quality improvements had outweighed the costs by over a factor of 10 [Defra, 2007].

Other 'burdens' assumptions in the deregulator's handbook include rules stifle innovation and are a barrier to economic recovery. Yet there is a substantial body of evidence indicating exactly the opposite. A 2011 US paper, which included case histories on environmental and workplace health risks, declared regulation "the unsung hero in American innovation" [Public Citizen, September 2011]. A second US report published in 2011, declared a proposed environmental air quality law was "a lifesaver, not a job killer" and noted it "is no threat to job growth" [EPI, 2011].

## **The greater benefits of regulation**

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US government authorities admitted in March 2012 that calculations in 2011 by the academic Paul Leigh [Leigh, 2011] that put the cost of occupational injury and illness in the country at \$250 billion a year “still do not capture the full economic burden.” The team from the National Institute of Occupational Safety and Health (NIOSH) added “the national investment in addressing occupational illness and injuries is far less than for many other diseases with lower economic burden even though occupational illnesses and injuries are eminently preventable” [NIOSH 2012]. Such assessments have equal validity in Scotland.

Recent research, including Leigh’s evidence from the US and other studies from the UK [Hazards 113, 2011] and Australia, has found poor health and safety is an enormous burden on business as well as workers, the community and the public purse. The 2012 Australian government study suggested employers could get a £2bn annual boost to productivity, which would equate to about £6bn in the UK, by just keeping their workers safe and healthy [Safework 2012]. And a 2010 paper in the journal *Safety Science Monitor* concluded good quality safety management “was a corollary to company share value.”

By contrast, stopping HSE inspectors visiting firms uninvited and then taking action is seriously bad for business [Hazards 113, 2011]. A May 2012 study led by Professor Michael Toffel of the Harvard Business School, generally regarded to be a business-friendly institution, discovered a surprise visit from an official safety inspector is good for both jobs and the prosperity of enterprises, and the benefits are ongoing. The news release announcing the study stated: “New study shows that workplace inspections save lives, don’t destroy jobs.”

The study, published on 18 May 2012 in the journal *Science*, used a “clinical trial” of California’s randomised safety inspections to discern their effect on both worker safety and companies’ bottom lines. The results were unequivocal: Workplace inspections do reduce on-the-job injuries and their associated costs and do not cause any harm to companies’ performance or profits [Levine, 2012].

The paper looked at company survival, employment, sales and total payroll to see if inspections were detrimental to the inspected firms. “Across the numerous outcomes we looked at, we never saw any evidence of inspections causing harm,” Toffel explained. And the effect was long lasting, with the report noting the reduced injuries and cost savings lasted for at least four years after the inspection.

Commenting on the study in the *Harvard Business Review*, Toffel and co-author David I Levine note: “Managers should welcome OSHA [the US HSE] inspections. Randomly inspected establishments improve worker safety and reduce employers’ premiums for workers’ compensation insurance. And we found no evidence that these establishments suffer any of the competitiveness problems suggested by political rhetoric - like disruptions leading to lost sales or solvency concerns, or any effects on wages - compared to our control group. The differences are small but telling: OSHA inspections offer substantial value to workers, companies, and society” [Harvard Business Review, 2012].

If the findings were replicated across the US, Toffel believes their revised estimate of the annual saving to business would be “very approximately \$20 billion per year. And this dollar cost doesn’t consider reductions in pain and suffering.” [personal communication, 8 June 2012]. That would equate to a saving in the region of \$4bn per year in the UK, and several hundred million dollars a year in Scotland alone.

This has profound implications for public policy as well as safety, because it is the public and the public purse which is picking up most of the cost. As in the UK [HSE 2011], ‘cost-shifting’ by US employers and insurers is landing the bill for work-related injuries and ill-health on the state and the community at large.

An April 2012 US study published in the *Journal of Occupational and Environmental Medicine* concluded the phenomenon leads to artificially low workers’ compensation premiums for employers. “This is a classic example of what we call a ‘negative

externality' in economics - where prices do not accurately reflect costs that spill over to others and have negative social outcomes," said Paul Leigh, lead author of the study and a University of California Davis professor of public health sciences [Leigh 2012].

"Workers' injuries and illnesses cost much more than what current workers' compensation payments suggest, and the resulting low premiums provide little incentive for companies to promote workplace safety." The study showed that just 21 per cent - or \$51.7 billion - of those costs were covered by workers' compensation. "Cost-shifting affects everyone, because we're all paying higher Medicare and income taxes to help cover that 79 per cent," said Leigh.

In the UK, government references to a 'compensation culture' have been a constant refrain in its attacks on Britain's 'health and safety culture' overall. In September 2012 the UK government announced what it intended to do about it, declaring it will "change the law next month so companies will only be liable for civil damages in health and safety cases if they can be shown to have acted negligently. This will end the current situation where businesses can automatically be liable for damages even if they were not actually negligent" [BIS news release, 12 September 2012]. Many aspects of compensation and social welfare support in Scotland remain under Westminster control.

The implication here is that workplace health and safety compensation claims are unfounded or unfair, increasing and are part of a burden on business that must be lifted. The opposite is the case. Few people suffering occupational injuries or diseases receive any compensation and the number compensated has fallen dramatically.

A February 2012 analysis by the TUC concluded the number of occupational injury and disease claims for employer negligence, "has fallen by a staggering 63 per cent over the past ten years" [TUC 2012]. Government statistics from the Compensation Recovery Unit (CRU) of the DWP show that employer liability claims fell from 219,183 in 2000/01 to under 82,000 in 2010/11.

To put that in context, HSE's self-acknowledged workplace injury and disease underestimates note in 2010/11 over 36,000 workers suffered a fatal or major injury at work, over 13,000 developed a work-related cancer, over 4,000 died of work-related obstructive lung diseases, and tens of thousands more had their lives damaged or curtailed by work-related road traffic accidents, other occupational diseases or injuries.

Cancer is one of the better compensated occupational diseases, but still results in fewer than 3,000 of the 13,000 plus people developing a work-related cancer every year receiving any payment, CRU figures indicate [personal communication, CRU 2012]. Fewer than 250 of those developing a non-asbestos occupational cancer each year - these cancers by HSE's conservative estimate kill about 4,000 every year and affect many more - are compensated. No-one can fake mesothelioma, lung cancer or indeed chronic obstructive pulmonary disease.

If businesses want to avoid compensation claims, all they have to do is avoid harming people. In common law occupational disease claims, claimants are expected to demonstrate causation, detriment and negligence before a personal injury solicitor would consider proceeding with a claim. The workplace compensation system in the UK certainly doesn't work, but that is because it places real and increasing legislative and cost barriers to genuine claims, not because it is unfair or burdensome in any respect to responsible employers.

The available evidence gives the lie to the policy of dispensing with 'proactive' inspections in favour of flagged re-active ones. What is effective is a random active inspection regime: this saves lives, cuts diseases, reduces pollution and helps businesses save money and maintain productivity. It could have saved BP a costly and deadly catastrophe in the Gulf of Mexico.

HSE, when asked on several occasions to provide its evidence showing a shift away from proactive inspections could be justified and was not detrimental, failed to provide or identify a single document or supporting source [personal communications, 3, 7, 8,



11, 12 September 2012].

The relatively recent US policy switch, placing a renewed emphasis on enforcement, is evidence driven. In 2010 the US government's Mine Safety and Health Administration (MSHA), for example, announced mining deaths in the US fell to an all-time low in 2009. Stronger enforcement and the tougher mine safety rules passed in 2006 were given as key reasons why [MSHA news release, 4 January 2010].

This enforcement activity did not deter growth. Reviewing progress in October 2011, MSHA director Joe Main said from April 2010 to June 2011, the number of underground mining employees grew by about 11 per cent. There was also an eight per cent increase in the number of new mining units, meaning either new operations or expansions of existing mines. Main said the industry's expansion demonstrates that strategic, targeted safety initiatives can work. "We've applied tools that are effective on safety but also don't deter growth," he said [Business Week, 11 October 2011].

Other countries believe there is a role for harsher penalties for safety and environmental crimes. In February 2012, two former executives of a Swiss building products conglomerate were convicted in Italy of causing the asbestos-related deaths of more than 3,000 people.

The defendants, the former owner of the Eternit conglomerate Stephan Schmidheiny and Belgian baron Louis de Cartier de Marchienne, a major shareholder in the firm, were each sentenced in Turin to 16 years in prison on a charge of involuntary manslaughter. Schmidheiny, 64, a Swiss billionaire, and de Cartier, 90, were accused of exposing workers at four Italian asbestos cement factories, as well as people who lived near the plants, to asbestos [Hazards 118, 2012]. In Scotland, there have been no similar prosecutions or penalties.

## Section 6

### The ever diminishing role of the Health and Safety Executive

The inspection and enforcement role of the Health and Safety Executive (HSE), the UK-wide agency charged with preventing workplace health and safety crimes and prosecuting the transgressors, has been in steep decline for five years. HSE and the UK government have argued there is a better ways to achieve the same result, but without imposing the same 'red tape' and 'burden' on business.

The latest in a long sequence of government steps back from oversight of the health and safety performance of business came from the Department for Business Innovation and Skills (BIS) in an announcement on 10 September 2012 [BIS news release, 12 September 2012]. BIS said it would "exempt hundreds of thousands of businesses from burdensome health & safety inspections", adding: "In future, businesses will only be inspected if they are operating in high risk areas, such as construction, or if they have a poor record."

The instruction not to inspect would be underpinned by a legally-binding statutory code. This move comes at a time the UK government is slashing the number of health and safety laws, with a particular emphasis on reducing the number of this type of statutory code [HSE 2012].

The government has argued both that a new business-friendly form of light touch, hands-off regulation is needed because the old system was too burdensome on business and constrained job creation, thereby preventing economic growth [Hazards 113]. It has also argued the old system of inspection and enforcement system had placed the UK at the top of Europe's workplace health and safety performance lead. Using this convoluted and contradictory logic to justify throwing out a league-topping system seems dangerously cynical. It is also based on a very narrow set of performance measures which could show HSE's international performance in an unrepresentative

rosy light.

The UK did not make Europe's top 20 for occupational health and safety performance, according to the Health and Safety Risk Index (HSRI), published by respected international risk analysts Maplecroft in January 2010. Rather than base its assessment primarily on injury trends – HSE's tactic – HSRI scores performance across eight indicators, including work-related fatalities and injuries, number of injuries causing work absences, number of deaths from work-related diseases, expenditure on health, life expectancy, government effectiveness, regulatory quality and the total number of ILO conventions ratified. Using these broader yardsticks, the UK managed just 30th in the world, out of 176 countries assessed.

Considered in the round, UK workers are far from coddled – they are facing some of the harshest working conditions in any of the richer nations. Rather than aspiring to improve this situation, the UK government is making it worse. In its resolve to address a safety burden on business that does not exist, it is instead increasing the genuine burden already borne by individuals and the public purse. As HSE inspection and enforcement activity has fallen, the combined fatal and major injury rate has risen [Hazards 119, 2012]. Ideology has supplanted evidence as the principal driving force fashioning the new workplace health and safety framework.

The government's antidote may be toxic, but with job insecurity rife [Hazards 119, 2012] it strikes a sensitive chord with both the business lobby and the public – the undoubted need for concerted measures to deliver the jobs and enterprise that will come with an escape from recession. The BIS news release, headed 'Red tape blitz to boost business growth', included this statement from Business Secretary Vince Cable: "Removing unnecessary red tape and putting common sense back into areas like health and safety will reduce fears and costs for businesses. We want to help give British business the confidence it needs to create more jobs and support the wider economy to grow. "Common sense is not defined.

It is a message being pushed from the highest levels in the government. On 5 January 2012, in a news release from 10 Downing Street headed 'Business boosting measures announced', prime minister David Cameron outlined measures to help businesses "cope" with the "health and safety monster", including cutting regulations, enforcement and exempting the self-employed from safety rules [10 Downing Street news release, 5 January 2012].

Chancellor George Osborne's 21 March 2012 Budget statement, announcing measures for "supply-side reform of the economy," said: "The government will scrap or improve 84 per cent of health and safety regulation" and added other measures would include the Health and Safety Executive (HSE) urging the European Commission to introduce "micro-exemptions or lighter touch EU health and safety regulation" for small and medium-sized firms, "based on ideas raised during the Red Tape Challenge" [HM Treasury 2012].

With the economy flatlining, businesses must be unfettered by regulation and inspection, the UK government mantra goes. But this is an act of faith in the power of business that makes neither occupational and environmental health and safety nor economic sense. Far from being a job killer, health and safety rules can stimulate innovation and improve company performance.

### **The impending death of enforcement**

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It is HSE's policy and practice that inspectors neither enter premises in order to seek out violations of health and safety law, nor respond to the vast majority of observed or known offences by resort to formal enforcement action [Hazards 119, 2012].

Employers are, wherever possible, to be offered advice, consultation and negotiation before enforcement action is taken. In other words, the work of the HSE is structured around a 'compliance', rather than a 'strict enforcement' model of regulation [Pearce

and Tombs, 1990; Tombs and Whyte, 2007]. A 2012 analysis of HSE inspection and enforcement role and injury rates, suggests HSE is failing by both measures [Table 1].

This effect is amplified as investigation and inspection criteria have been tightened considerably as a result of recent policy changes and resource constraints, meaning far fewer serious incidents are now investigated and when routine inspections do occur, they are not entire workplace inspections, but limited to prescribed priority risks.

Except in the case of the most egregious health and safety offences, enforcement action is invoked only where processes of persuasion, negotiating and bargaining, often over a very protracted period, have proven 'unsuccessful'. For the HSE, law has become the 'last resort' [Hawkins, 2002] when it comes to the discovery, investigation, and response to, health and safety offences.

<b>TABLE 1: WHAT HAPPENS WHEN A WATCHDOG WON'T BITE</b>					
	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>
Total HSE-enforced RIDDOR fatalities and major injuries	33,300	33,076	36,519	35,533	36,062
Percentage investigated by HSE [number]	8.53% [2,841]	8.33% [2,755]	5.82% [2,127]	5.76% [2,048]	5.11% [1,844]
Percentage resulting in HSE prosecution activity [number]	1.07% [355]	1.12% [371]	0.98% [359]	0.76% [271]	0.56% [201]
Percentage resulting in any HSE enforcement activity	2.14%	2.47%	2.03%	1.82%	1.54%

The compliance approach has been consolidated by a government agenda that ensures the HSE's acceptance at a corporate level of the need to take into account regulated industries' commercial constraints and the need to balance regulatory goals with the economic 'health' of the nation [Tombs and Whyte, 1998]. This exposes the political pressures that have acted to construct HSE as a body which must cooperate with and advise industry rather than as a law enforcement agency dealing with what are criminal breaches of health and safety law [Pearce and Tombs, 1998].

The assumptions that underpin the work of the HSE act to structure the day-to-day relationships regulators have with duty holders. This is indicated in evidence from the research that inspectors consistently fail to examine the role of senior company officers in relation to deaths at work [Bergman, 1994: 97].

HSE has only recently gone public with an admission its dedicated focus on health and safety at work is history, and the watchdog is instead adopting a new plan which also aims to "enable innovation that brings economic growth." This statement, in the HSE Delivery Plan for the period 1 April 2011 to 31 March 2012, seems entirely at odds with HSE's legal duties, as spelled out in HASAWA and in the DWP Framework Document with HSE, but entirely in tune with the current government's policies.

In a preamble to the new work plan, HSE chair Judith Hackitt says changes have been driven by government decisions cutting HSE's budget, down from £227.7m in 2009/10 to £198.7m by 2011/12, and demanded a dramatic cutback in inspection activity. This move was in line with the UK government's explicit direction to HSE and other enforcers to dramatically curtail their inspection function. These cuts marked the start of a more savage attack on HSE's budget.

This politically imposed approach, leaving HSE a regulatory agency hampered by macroeconomic and company-level cost considerations it is neither skilled nor legally tasked to determine, relegates in HSE's priorities the enormous human and economic damage done to workers north and south of the border through poor occupational safety and health.

Successive governments have cut the HSE budget. The current government has

continued those policies, phasing in over three years a 35 per cent cut in HSE's budget by 2015 [Hazards 113]. A Fee for Intervention (FFI) cost recovery system to come into effect in October 2012 will not plug the funding hole. HSE will not be allowed to retain more than £10m in 2012/13, with the cap rising to a maximum of £23m by 2014/15 – by then, though, HSE will be struggling with an annual £84m government imposed hole in its budget [Hazards 112].

The cuts have decimated HSE. In 1994, HSE had 4,545 staff. By April 2005, this had fallen to 3,903 [Hazards 93]. Five years later, in April 2010, the combined HSE and Health and Safety Laboratory (HSL) staffing figure was 3,702. By December 2010, total staffing had fallen to 3,611 [Hazards 113, 2011]. By June 2012, this had fallen to 2,889, and the full impact of the budget cuts had not yet been felt [Prospect news release, 9 September 2012]. The number of frontline HSE field inspectors in Scotland fell from 105 in 2010 to 98 in 2012, a drop of almost 7 per cent. The total number of HSE staff in Scotland fell from 264 in 2008 to 253 in 2012, a drop of over 5 per cent.

According to HSE inspectors' and specialists' union Prospect, HSE was by September 2012 already bearing the brunt of a 25 per cent spending cut, and had been required to reduce proactive inspections for high-hazard sectors by a third. It confirmed most workplaces have already been exempted entirely from unannounced, preventive inspections.

The mixture of resource erosion and a politically determined reduction in enforcement functions and activity has had a clear negative impact. An analysis of fatal and major injury figures in the UK over the last five years shows a clear inverse relationship with workplace safety inspections and enforcement activity. As inspection and enforcement goes down, injuries go up [Hazards 119, 2012].

While it has substituted voluntary partnership and self-regulatory initiatives for enforcement, it has failed singularly to allow one partner any part in this process – the workers who have most to lose from exposure to hazards at work. In 2003, HSE started a number of pilots where trade union appointed "Worker Safety Advisers" went in to non-unionised organisations. An HSE evaluation of the pilot reported that over 75 per cent of employers said they had made changes as a result and almost 70 per cent of workers had seen an increase in awareness of health and safety [HSE 2007].

The approach was not developed by HSE and has not featured since in any policy proposals from either HSE or government. Nor have ideas proposed by unions to create a new breed of empowered Worker Safety Advisers, with a right to issue 'Provisional Improvement Notices'. These would allow on-the-ground workers to stop work presenting an imminent risk to health in the absence of HSE inspections. Research published by HSE concluded this system has been effective and used responsibly in both Sweden and Australia [HSE 2002].

### **It's worse for workplace health**

If oversight of workplace safety is bad, the situation on workplace health is even more dire. Very poor data exist on occupational diseases in Scotland and elsewhere in the UK. What data do exist are on occasions ignored or downplayed by HSE [O'Neill, 2007]. This partly relates to resources, partly to staff training and partly due to the policies and practices of HSE. However, data and estimates do exist in HSE that indicate it should prioritise matters differently.

Rather than increase resources for occupational health, HSE is doing the opposite, and it is having a dramatic impact on its functions. An estimated 90 per cent of the Health and Safety Executive's (HSE) occupational health inspections will cease as a result of a change to the law called for by the government, the union Prospect has warned [Prospect news release, 9 September 2012].

The union, which represents inspectors and specialists in HSE, says planned changes to RIDDOR - the Reporting of Injuries, Diseases and Dangerous Occurrences

Regulations 1995 – will mean the safety watchdog will ditch all occupational health-related inspections unless they relate to a biological agent at the workplace. A consultation due to close on 28 October [HSE 2012] proposes removing the requirement on employers to inform HSE of conditions including certain strain injuries, poisonings, vibration diseases, dermatitis and occupational cancers, dust diseases and asthma.

HSE's Corporate Medical Unit is so depleted it can no longer provide even basic cover on occupational health advice and prevention. Prospect's research also shows in September 2012 HSE had only five specialist radiation inspectors, with one of these slated to go before the end of the year. It warns that HSE has withdrawn from proactive radiation inspection to save costs, even though there are 280 deaths a year from occupational exposure to radon and widespread non-compliance with the Ionising Radiations Regulations 1999.

Prospect says occupational health has already been sidelined by HSE, which now has only three occupational physicians and 18 occupational health inspectors, down from 60 of each in the early 1990s.

### **Making vulnerable workers pay**

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Inspectors regard managements rather than workers as their primary point of contact in regulated workplaces. Inspectors are normally reluctant to meet with workers to discuss matters confidentially or to use workers' complaints as a basis for questioning employers' systems of safety management [Whyte, 2006]. This approach often causes problems for workers who contact HSE directly when their concerns are not being taken seriously in the workplace, since HSE is reluctant to investigate complaints without revealing the identity of workers or the precise nature of the complaint [Whyte, 2000]. HSE refuses outright to investigate anonymous complaints [Hazards 116, 2011].

A July 2012 document from the UK Ministry of Justice, Introducing fees in employment tribunals and Employment Appeal Tribunal consultation response, announced changes to the employment tribunal system which will greatly diminish the protection available to workplace whistleblowers. The changes to take effect in summer 2013, could require workers who believe they "suffer a detriment, dismissal or redundancy for health and safety reasons" to pay an initial fee of £250 to initiate the tribunal process, and a further £950 if the case goes to tribunal [MoJ, 2012].

Rather than address social inequalities by injecting new resources and impetus, the Westminster government announced on 24 May 2012 it was going to reduce the enforcement scrutiny provided by the regulator intended to protect some of the most vulnerable of all workers, the Gangmasters Licensing Authority (GLA). Scotland has many workers covered by the current gangmaster legislation, in both agriculture and other food processing sectors.

The Department for Environment Food and Rural Affairs (Defra) said GLA should focus "on the worst excesses in the areas it regulates." GLA is intended to protect workers from exploitation in agriculture, shellfish gathering and food and drink processing and packaging. Any person or business wanting to act as a gangmaster must apply for a licence - issued by GLA after an initial inspection. But under the government's proposals this initial inspection would be removed [Defra 2012].

The Defra announcement came two days after a University of Manchester study concluded forced labour is widespread in sectors including construction, food processing, catering, cleaning and agriculture, and recommended GLA's remit be expanded to other sectors to protect vulnerable workers.

A 15 May 2012 report from the Joseph Rowntree Foundation (JRF) warned migrant workers in Scotland and elsewhere in the UK continue to live and work in inhuman conditions and indebted to gangmasters. JRF said the study was one of the largest yet conducted into conditions experienced by workers in the food sector, from farm and



factory workers through to those toiling in restaurants. They interviewed 62 workers, mostly from Poland, China, Lithuania and Latvia, working in east-central Scotland, south Lincolnshire, south west England, London and Liverpool [JRF 2012].

More than two-thirds complained of living in fear, experiencing psychological harm, working more than 50 hours a week, being paid below the minimum wage and having illegal deductions made from their wages. The report noted: "The bottom of the UK labour market, despite protections, can be deeply unattractive and all too often exploitative. Work is tough, low-paid and insecure... Fear and powerlessness were almost ubiquitous."

One tragedy of a weakening of official oversight is the gangmasters' law itself and the creation of the Gangmasters Licensing Authority to enforce it came about as a result of the manslaughter of 23 illegal Chinese migrant workers, drowned on Morecambe's cockle beds in February 2004. Following a successful prosecution of the labour supplier, HSE said it had "taken the opportunity to re-emphasise the importance of worker protection imposed by health and safety legislation" [HSE, 2006]. HSE appears to have forgotten its own lesson.

### **What is HSE doing in Scotland?**

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Enforcement of occupational health and safety in Scotland is a matter reserved to Westminster and HSE policy and resources are determined by London. However, environmental health officers employed by local authorities in Scotland also enforce the relevant health and safety legislation in a variety of workplaces, as well as legislation dealing with some aspects of environmental pollution. It is estimated that local authorities health and safety inspectors cover around 45 per cent of Scotland's workforce in 'lower risk' activities and HSE cover the rest [HSE 2011:83].

In 2009/10, HSE served 1,400 notices in Scotland of which 815 were improvement notices and 589 immediate prohibition notices (HSE 2011:85). This does not indicate a Scottish workforce employed in workplaces where high health and safety standards existed or were maintained, particularly as most workplaces are unlikely to receive a visit from HSE more than once in a working lifetime. You can only get served if you get seen – and in most cases, HSE and UK government policy require that no-one is looking.

#### **Recent fatalities, serious injuries and diseases reported in Scotland**

- Two lorry drivers die in crash on A9 near Blair Atholl. June 2012
- Shopkeeper stabbed to death in his Paisley shop dies. June 2012
- Tractor driver injured after tractor overturns in Ayrshire. June 2012
- 43 year old estate worker killed by falling tree at Forres. April 2012
- 31 year old road worker killed by digger and roller in Perthshire. April 2012.
- Three firefighters injured in appliance crash on road in Aberdeenshire. March 2012.
- Wind farm firm admits safety failings in April 2012 following death of teenage Brazilian worker in Stirlingshire in 2007.
- 59 year old man dies while tree felling after being seriously injured by a timber vehicle. February 2012.
- Oil tanker driver dies in road collision in Perthshire. January 2012.
- Teacher receives six figure payment for stress at work: teachers across Scotland received compensation totalling £650,000 for work-related injuries. January 2012.
- Train drivers traumatised by deaths on the line. Since March 2010 there have been 40 fatalities involving ScotRail trains.
- Enquiry finds trawler crewman killed off Aberdeen in 2011 by carbon monoxide while pumping out water. June 2012.

- Court fines company after 26 year old building worker seriously injured because of a lack of fall prevention equipment on an Aberdeen site in 2010. June 2012.
- Firm fined after man died from head injuries while carrying out maintenance work in Glasgow in 2008. January 2012.
- Fines cut to £300,000 and £20,000 for two companies responsible for the deaths of two workers on a fish farm barge in 2009. January 2012.
- 69 year old man died at work when a heavy gate toppled on him in Kilmarnock. December 2011.
- Two electricians, 22 and 45, had "life changing injuries" after suffering serious facial burns when a circuit box exploded in a Fife industrial accident. December 2011.
- 23 year old abattoir worker in Paisley crushed by falling carcass. November 2011.
- Enquiry finds that there was a litany of mistakes linked to a gearbox on a helicopter transporting oil workers that crashed killing 16 workers in 2009. November 2011.
- Court fined company after a 61 year old fish farm worker drowned on the Isle of Lewis in 2008. November 2011.
- Perthshire malt company fined after worker in 2008 had part of his leg amputated in a grain silo machine. October 2011.

Workers in Scotland still face life-threatening risks and need the protection of effective inspection and regulation. The lion's share of the harm caused by work is in the form of occupational diseases. Most are neither reported to HSE nor appear in the media. They exact a heavy toll which is poorly recorded and poorly addressed. Compensation and justice are rare exceptions, not the rule.

Using World Health Organisation (WHO) and European Agency for Safety and Health at Work (EASHW) current estimates of occupational diseases and injuries, far more people die in Scotland from workplace conditions, than from suicides, murders and road traffic fatalities combined [Watterson et al 2008a]. It is a burden HSE is singularly ill-fitted to address; it has one part-time medical staff member dealing with around 2.5 million workers in the whole of Scotland.

Health and safety in Scotland faces many challenges (OEHRG 2011; ICL/Stockline Report 2007). Health and Safety Executive (HSE) figures released in July 2012, Statistics on fatal injuries in the workplace 2011/12, show the number of fatalities in Scotland in 2011/2012 was 20, up from 14 the previous year. The fatality rate of 0.8 deaths per 100,000 workers in the country compared to 0.6 per 100,000 in Britain overall. In HSE's terms, these are small numbers and prone to fluctuation, so you can't read too much into the fatality rate for a single year. However, over many years HSE has recorded significantly higher rates of fatal and major injuries for Scotland as compared to the UK as a whole.

Scotland lagged England and Wales on legal action to address the most egregious violations of workplace health and safety. While in England and Wales up to 2007, eight company directors and five companies had been convicted of manslaughter, no director or company had ever been convicted of a homicide offence following a work-related death in Scotland.

The position in has been improved by measures taken by the Scottish Government to ensure better co-ordinated investigations of workplace health and safety crimes, including the creation in January 2009 of a dedicated health and safety division within the Crown Office and Procurator Fiscal Service [COPFS 2009]. Even so, there has not been an avalanche of additional employer accountability.

COPFS statistics on the first two years of operation, published in November 2011, "show that more than 70 cases resolved without the need for trials by securing early guilty pleas from the accused" [COPFS 2011]. This is in a country where 2,500 workers suffer a fatal or major injury each year, a toll exceeded several times over by work-related

occupational disease deaths.

The human costs and consequences of injuries and illnesses that are work-caused or work-related in Scotland remain considerable and grossly under-reported. This burden hits hardest those already facing other major health, environmental and socioeconomic inequalities and contributes to such inequalities.

In 2009/10, the costs in Scotland of occupational injuries from reportable accidents were estimated to be £187 million and 2.5 million working days were lost (Royal Environmental Health Institute of Scotland 2012:48). HSE in 2012 put the figure for Scotland at 2.1 million working days lost due to workplace injury and ill health, an average of 1.1 days per worker [HSE 2012]. Both estimates suggest up to a quarter of all sick leave in Scotland could be eliminated if workplaces were safe and healthy.

Existing enforcement and related stakeholder mechanisms and policies have failed to improve the record in any major way: they are strong on rhetoric, weak in both practice and delivery. HSE's cuts-driven prioritisation of 'high risk' injury industries can also miss high risk workplaces for occupational disease. Various strands of the 'low risk' plastics industry, for example, have been linked to elevated rates of cancer, dermatitis and asthma and other respiratory diseases.

Employers have the primary responsibility for ensuring health and safety at work. Good employers can and do achieve good standards. Bad employers must be increasingly aware that for many of the injuries and diseases they create in their workforces, the chances of inspection, enforcement and prosecution in Scotland will be especially low.

Bad work is bad for your health and safety and much still exists in Scotland. Neither HSE Scotland nor local authority inspectorates (LAIs) have the resources or policy to address the resulting toll of illness and injury. New approaches are needed. Cuts in HSE have made matters significantly worse; for safety's sake, they should be reversed.

#### **Has workplace safety had its chips?**

The Health and Safety Executive (HSE) and other agencies responsible for enforcement of workplace health and safety standards must resist pressure to divert resources away from core prevention, information and enforcement activities to broader lifestyle-focussed health promotion campaigns: these should be funded by other agencies. In Scotland, there is already a distinct focus on these issues in the Good Places, Better Health initiative and related Environmental Determinants of Public Health in Scotland (EDPHiS) multi-disciplinary collaborative research project.

Occupational and environmental health risks needed a dedicated approach. In an ideal world, they would be integrated into a comprehensive public health model. In reality, such a move would see them swallowed up in a larger public health pool preoccupied with lifestyle and health promotion. This would relegate occupational and environmental health out of sight and off the priorities checklist, behind traditional priorities like smoking, diet and alcohol consumption.

All of these 'lifestyle' factors can be related to employment or the lack of it, and are certainly all affected adversely by the economic downturn. The UK government's Health Work and Wellbeing strategy, led by Dame Carol Black, puts lifestyle to the fore and barely acknowledges the job-related causes of ill-health.

It is also a central part of a benefits crackdown. The initiative, whose webpage has been absorbed by the Department of Work and Pensions, notes: "Ensuring more people with health conditions or impairments are able to work contributes to the Government's welfare reform package by helping to reduce the number

of people taking sick leave and claiming sickness benefits.” It is, according to DWP, an initiative supported by both HSE and the ‘Scottish Executive’ [DWP webpage, accessed 12 September 2012].

Punitive benefits checks coupled with soaring job insecurity [Hazards 119, 2012] and an erosion of employment rights are making the situation worse for those harmed by work or fearing for their jobs. The situation will deteriorate further with financial pressures on the public sector both as employers and enforcers, and pressures on the sick and disabled to return to work when not fit to do so because of flawed Work Capability Assessments.

Linkages between HSE and the NHS Scotland, in both hospital and primary care, and other bodies - to better identify injuries at work and occupational diseases - should be improved to identify and hold accountable employers who are persistent poor occupational health and safety (OHS) performers. These developments should also be connected to access in Scotland to at least one funded and independent OHS advice centre for vulnerable employees.

HSE has highlighted the message that ‘Good health and safety is good business’. On this basis, the UK government should reverse its cuts in occupational health and safety resources and should abandon and reserve its deregulation drive. HSE Scotland lacks sufficient staff, resources and effective practices to support OHS especially in small and medium sized enterprises (SMEs), and for employees in union and non-unionised workplaces, to ensure healthy and safe working conditions.

Denmark with a population of 5.5 million came first in the Maplecroft world health and safety ranking, with Finland, population of around 5 million, also scoring highly and sharing some geographical characteristics with Scotland. Finland, despite cuts in its own OHS agencies, still remains a world leader on occupational health, provides greater information and support to employers and employees, and records and monitors occupational diseases far better than in the UK. As Finland and Denmark are independent countries of similar population size to Scotland, they demonstrate what Scotland could achieve if the UK and Scottish governments committed themselves to the task of good worker health and safety.

The latest HSE approach to Scotland bears out its failing deregulatory position and reveals a lack of solutions to the big enforcement problems that require an answer if HSE is to safeguard the country’s workforce properly. At a 2011 HSE Board meeting in Scotland, Scottish-specific issues were discussed [HSE Board Meeting September 2011]. Whilst there was acknowledgement that Scotland had major hazards and its health and safety record was poor compared with elsewhere in the UK, this was accepted by the HSE as inevitable because of the highly hazardous nature of many of Scotland’s industries.

This is in stark contrast to countries such as Australia where the expansion of hazardous industries such as mining has been rapid yet the health and safety record in states such as Queensland had improved. Equally telling has been the record of the Olympic construction project with a low injury rate.

In terms of the big picture, HSE looks like it has given up in Scotland even on the safety front (and its activity on occupational disease prevention is far worse). For example, one major item for discussion on public services was the need for ‘work to encourage sensible risk management and reduce risk averse behaviour’. This included an HSE action plan with the Scottish Schools Equipment Research Centre to produce a suite of material to promote proportionate risk management in schools. Another item appeared to indicate that faith not enforcement was a new HSE business friendly and low cost strategy for dealing with risks.

A January 2010 HSE Agriculture e-Bulletin reported the following. “Plough Sunday Worshippers Make the Promise. Parishioners of St. Andrew’s Church in Kirkby Malzeard, North Yorkshire, made the promise to come home safely from the fields at

their annual Plough Sunday service. Judith Donovan, HSE Board member and local resident, said: 'The 'Make the Promise' campaign is designed to unite communities around the importance of coming home safely at the end of every farming day. This year, Kirkby Malzeard has joined together to 'Make the Promise to Come Home Safe' and I hope that the promise knot can act as a reminder of this in the busy months ahead.'" Faith and knots seem poor strategies for HSE to follow in this industry.

The Agriculture Revisited stakeholder strategy therefore planned to work with HSE Field Operations Division (FOD) Scotland "to engage with a range of industry leaders, including NFU Scotland, to support them in dealing with the challenges of taking ownership of the industry's poor health and safety performance in Scotland and of demonstrating leadership in tackling the problem. An early encouraging sign is the engagement plan with the Scottish Government's Scotland's Environmental and Rural Services Partnership (SEARS). It includes: identifying opportunities for Scottish Ministers to raise awareness of health and safety in agriculture through co-ordinated press releases; including health and safety messages in farm visits by other regulators involved in SEARS; promoting the free advisory services of the Scottish Centre for Healthy Working Lives to the Scottish farming sector."

HSE further noted that "although proactive inspection of farms is no longer assessed as an effective use of resource, HSE's commitment to the programme of inspection of Liquid Petroleum Gas installations does involve many farm visits in Scotland and enforcement levels relating to LPG problems continue to be high".

This is an extraordinary strategy especially as mortality from LPG explosions on Scottish farms is, as far as we can ascertain, nil whereas there are a whole range of well-known occupational safety and health hazards that will remain neglected due to a lack of 'pro-active' inspections in one of Scotland's worst industries. Other more pressing and more frequently deadly agricultural hazards in Scotland, like farm machinery, quad bikes, asphyxiations, manual handling, falls and occupational lung disease – are spared this dedicated enforcement focus.

The HSE Board meeting went on to observe: "Reactive investigation has always accounted for a significant proportion of the Scottish workload but has recently increased as a proportion of inspectors' time in line with Government policy". This is the nub of what is a de facto deregulatory strategy.

Not considered in the document is the role that could have been played by utilising the on-the-ground knowledge and presence of agriculture workers themselves. Yet agricultural workers were the first to prove successful in trials of a 'roving safety representative' (RSR) scheme to have union-trained safety reps cover a geographic area, a cost-effective way to spread safety oversight across a geographically diverse workforce [HSE 2006].

In its evaluation of a pilot RSR scheme, HSE commented: "The report shows that the participating farms demonstrated real improvements in health and safety management terms as a result of the RSR visits; primarily in terms of practical controls or skills, but also in terms of management attitudes and competences. There was also evidence of improvements on farms visited by the health and safety advisers; primarily in terms of management practices including the development of better organisation and arrangements for managing health and safety on the farms. In contrast, few gains were identified in a control group of farms. On the basis of these results, it was concluded that implementing a system of RSRs in agriculture and associated businesses merits further consideration."

Instead of even considering innovative, operationally- and cost-effective regulatory approaches, HSE is now unabashed in embracing deregulation, even where its application comes in the most deadly industries. The September 2012 HSE Agriculture e-Bulletin promotes its "new Health and Safety Toolbox, which is aimed at easing the burden on smaller business." At best this is grossly insensitive and politically driven; at worst it reflects an organisation becoming increasingly divorced from its primary function of protecting life and limb. HSE noted at the 2011 Board meeting in Scotland that the



agricultural workforce in Scotland “account for approximately 4 per cent of the total yet was responsible for around 40 per cent of fatal accidents at work in Scotland.” That is a real burden.

HSE more recently commented on ‘areas of concern but where proactive inspection is unlikely to be effective and is not proposed’ eg. agriculture, quarries, and health and social care; and (iii) Lower risk areas where proactive inspection will no longer take place. These areas include low risk manufacturing (eg. textiles, clothing, footwear, light engineering, electrical engineering), the transport sector (eg. air, road haulage and docks), local authority administered education provision, electricity generation and the postal and courier services.

The reforms initiated are not selected on efficacy, but on how closely they fit the current UK government’s deregulatory obsession. Reform may be necessary, but to fail to even consider changes that could usher in improvements at minimal cost or to maintain enforcement and inspection regimes that had been shown to save lives, health and business cost smacks of a criminal denial of care.

There are ways Scotland could better insulate itself from Westminster’s deregulation preoccupation; there is even a UK precedent. Northern Ireland has its own HSENI. An independent Scottish Occupational Health and Safety Agency (SOHSA) could ensure greater accountability on compliance and support, with regard to workplace health and safety, to the Scottish Government and greater effectiveness and use of resources.

An enforcement agency controlled from Scotland would also enable more effective working with local authorities and NHS Scotland which is not reserved, SEPA which is not reserved, and other Scottish specific agencies dealing with business and the environment that either impact on or are influenced by work environment and related issues [Watterson 2011].

## Section 7

### SEPA’S wrong-headed embrace of better regulation

The Scottish Environment Protection Agency (SEPA) is at a crossroads. An official review initiated in May 2012 as a public consultation, presents the opportunity to improve the way SEPA acquits its core functions; protecting the environment, engaging with all parties in developing and monitoring its performance and in identifying problems, getting them remedied and where, necessary, punishing those committing environmental crimes. There are though worrying signs. While the consultation contains a number of creative ideas that could improve SEPA, lurking throughout is an assumption that deregulation will play a part in the changes. Under the guise of a shift to ‘better regulation’, the work of SEPA is under review and under threat.

The established function of SEPA, ahead of the proposed reinvention, is quite clear. Its website notes: “SEPA’s main role is to protect the environment and human health. We do this by regulating activities that can cause pollution and by monitoring the quality of Scotland’s air, land and water” [SEPA website, accessed 30 July 2012].

The May 2012 SEPA consultation document, ‘Proposals for an integrated framework of Environmental Regulation’, adds a second purpose. It says Scotland’s environmental regulator should ensure “its actions support the development of a thriving and sustainable economy” and “the Scottish Government’s overall purpose of increased and sustainable economic growth” [Scottish government, May 2012].

Sustainable economic growth is a laudable thing and a core concern of government, but to conflate the primary purpose of SEPA with an economic development agenda, as the agency appears to be doing, sends out a poor message to the citizens of Scotland. Other agencies and governmental departments have economic growth quite properly as their priority activity. SEPA may well, as a secondary function, benefit sustainable economic growth and businesses will contribute to necessary environmental protection.

The regulatory proposals for SEPA, however, appear to privilege commercial and business interests above environmental protection.

There is an underlying assumption in the emergence of these economic bolt-ons to SEPA's role that regulation has at least the potential to damage economic growth. In redefining SEPA's function, environmental protection is relegated in importance. Instead, SEPA is the subject of both an explicit message to adopt softer enforcement approaches and an implicit hands-off message to a regulator perceived as a potential barrier to Scotland's success.

Lost in these economic calculations can be the proper consideration of the benefits of regulation. The UK government's 2007 report, 'The air quality strategy for England, Scotland, Wales and Northern Ireland', noted: "Air pollution is currently estimated to reduce the life expectancy of every person in the UK by an average of 7-8 months with estimated equivalent health costs of up to £20 billion each year. Air pollution also has a detrimental effect on our ecosystems and vegetation. Clearly there are significant benefits to be gained from further improvements"[Defra, 2007].

As an example, the report noted air quality improvement initiatives "in the road transport sector and the electricity generating sector have had a major impact in reducing air pollutant emissions and were shown to be very cost beneficial, with benefits estimated to have exceeded costs by up to a factor of 24. Of particular importance was the fitting of catalytic converters to motor vehicles and the increased use of gas to generate electricity. These had a major impact on improving air quality and ensuring progress towards the UK's air quality objectives and European air quality limit values. They have also resulted in extremely large benefits to society by reducing the health and environmental impacts of air pollution, with road transport policies achieving benefits worth £2.9 to £18.4 billion and policies in the electricity generating sector achieving benefits worth £10.8 to £50.6 billion between 1990 and 2001."

The report cited research on the impact of the air quality strategy showing "that, between 1990 and 2001, policies have resulted in a marked decline in concentrations of air pollutants, with an estimated reduction of more than 4,200 premature deaths and 3,500 hospital admissions per annum. It also suggests that these policies reduced life years lost by between 39,000 and 117,000 life years in 2001. Furthermore, the evaluation shows that these policies have been cost beneficial with an estimated £68 billion benefits generated across the UK, set against costs of £6 billion during the 1990 to 2001 period."

The cost arguments in favour of effective pollution control measures, something that requires both a strategy and a properly resourced and enabled enforcement agency to implement it, would appear to be overwhelming. This is not however reflected in the May 2012 proposed policy blueprint.

In 2010, SEPA produced proposals for Better Environmental Regulation. These contained the admirable objectives of reducing harms to the environment and human health and ensuring that people and communities were actively engaged in protecting the environment. To achieve these objectives, it was recognised that accessible and useful information was needed and that businesses complied with the necessary regulation [SEPA 2010:2]. This was underpinned, however, by the concept of asset management and 'risk-based' approaches that we comment on elsewhere in this report and has led to further proposals that could move SEPA away from effective regulation into a 'better regulation' swamp.

### **Better regulation displaces better policies**

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The morphing of SEPA's role into a more business-focussed, economic development oriented body is further evidenced by the disappearance of the previous commitment to "environmental justice" [Poustie, 2004] in the 2012 consultation on the role of the regulator and regulation. It decouples the agency's functions from tackling key environmentally-linked health inequalities in Scotland, through strategies for reducing

the pollution and environmental degradation experienced by the country's most vulnerable communities. This would appear to be at odds with the Scottish Government's public health priorities, which do include addressing health inequalities. Environmental justice in Scotland was flagged by Friends of the Earth Scotland in the late 1990s, who developed proposals for reducing injustices [FOE nd].

Poustie made a number of explicit and highly pertinent recommendations to SEPA that addressed both the environmental justice (EJ) and, indirectly, the health inequalities challenges that face Scotland's most vulnerable populations [Poustie 2004:102-105]. These included:

- guidance on environmental justice to licensing teams and enforcement officers who should also record and take into account how they weighted EJ in their licensing and enforcement decisions
- development of methodologies for assessing communities that are disproportionately affected by pollution
- develop a monitoring programme to establish which communities are disproportionately affected by pollution
- monitoring strategies should be targeted partly with reference to EJ
- EJ concerns should be raised, especially in terms of cumulative impacts, when SEPA is consulted in the planning process.
- Review existing licenses in terms of pollution and EJ and consider EJ in the context of any new licence applications in such polluted communities
- Target enforcement policy to deal with pollution affecting communities disproportionately linked also to human rights dimensions
- Establish participation base lines and link to information access and disclosure to increase EJ awareness and target participation in its work
- Consider designating and training community liaison officers.

It is difficult to identify which if any of these recommendations have been taken up by SEPA but contact with vulnerable communities in areas of pollution over the last 5 years would suggest that few have been visibly adopted or are currently actively implemented.

The abandonment by SEPA of any obvious commitment to environmental justice greatly weakens both the credibility of SEPA and the means at its disposal to ensure effective public engagement rather than selective public engagement. SEPA also runs the serious risk of appearing to reflect and respond to business interests whilst ignoring a raft of those pressing public and environmental health challenges faced by Scotland's most vulnerable communities.

SEPA's position could easily be viewed as disproportionately favouring vested business interests over both the environment and several publics. And as we have indicated earlier, 'better regulation' often favours bad actors far more than responsible firms, and ignores both the financial, health and social gains to the wider community – and the public purse – of addressing environmental abuses and their consequences. SEPA appears to be an outlier on this issue when compared with World Health Organisation (WHO), United Nations Environment Programme (UNEP) and the European Environment Agency (EEA). Environmental justice cannot and should not be viewed as a fad but should be central to the thinking of any effective environmental regulatory agency and provide a major plank in improving health and well-being of large parts of our population, which are also prerequisites for a healthy, productive economy.

A similar disparity emerges in terms of SEPA's stated engagement with the precautionary principle. For example, assessing low level exposures to endocrine disruptors is challenging and may indicate that what were viewed as low level risks in the past are no longer so, but constitute potentially major public health threats. Equally the epidemiological assessment that large populations exposed to certain low level exposures to pollutants may pose a greater public health risk than small populations exposed to potentially high levels of pollutants appears somewhat neglected.

'Stakeholders', according to SEPA, have a role in its proposed new regulatory regimes (SEPA 2012). It is unclear, however, who exactly the key stakeholders are, how they are

selected and how their views are assessed and weighted. 'Public engagement' is acknowledged by SEPA too but the references looked tacked on and tokenistic. What meaningful public engagement will be needs significant amplification and explanation in any regulatory regime before it can be of value. Bearing in mind that SEPA has abandoned its interest in environmental justice; communities may be sceptical if not cynical about the reference.

Equally confusing are references in the consultation document on SEPA's future to individual and collective action. This suggests the responsibility for Scotland's environment can be weighted equally between these players rather than primarily controlled by businesses and politicians. On the other hand, there is a good deal of evidence to show that the 'better regulation' approach, which incorporates SEPA through the Scottish Regulatory Review Group (RRG), is heavily loaded towards particular business interests and other stakeholder groups are marginalised.

Minutes of the May 2012 RRG meeting notes measures building on "on SEPA's better regulation agenda... may lead to legislation but the focus is also on culture change with the ultimate aim of protecting the environment through a risk based approach to prioritising activity that will also benefit regulated businesses. "This suggests the current thinking of SEPA could be seriously skewed away from the interests of citizens in Scotland and towards business.

The primary responsibility for environmental protection should lie with those who create the pollution in the related supply chains and who have the power, opportunity and legal duty to avoid polluting in the first place. Individual citizens are at the bottom of the chain. Interventions and controls will have the greatest impact at the top of the chain.

SEPA's leadership has stated repeatedly in 2012 the agency is not going down the better regulation road and that unlike the problems facing the Environment Agency in England, they had a different approach despite their 25 per cent budget cut. Policy needs to demonstrate such a position, particularly as the Scottish Government appears to have retained a taste for better regulation which it might expect to be reflected by agencies like SEPA.

There are some activities that SEPA should clearly prevent because of the damage done to the environment and threats to public health. In its new guise, SEPA aims at 'reducing the risk of damage', an approach that seems to qualify that duty quite markedly, and is a charter for the incremental erosion of the environment in Scotland. The favoured non-regulatory activities, including offering information, support and advice on environmental protection are important functions for SEPA but require sufficient staff, resources and expertise. This cannot be done effectively on the cheap. They should certainly not be used as a cheap alternative to frontline inspection and enforcement activities.

The assumption that prohibiting or closely regulating environmentally damaging activities is counter to economic growth is not proven. What is known is that in many instances the assumption is entirely wrong, particularly when wider societal costs are considered. Regulatory controls frequently trigger innovation and growth, lead to greater efficiencies and more sustainable production as research at MIT and elsewhere have shown. Having agencies with sufficient staff and resources to inform and advise businesses about how to meet regulations, cut pollution and improve profits and worker health and safety is also critical, as the USA Toxics Use Reduction legislation in Massachusetts has shown for over two decades [TURI 2011].

An 'integrated' approach by SEPA as a regulator, proposed in the consultation, is commendable but how this integration will be achieved and how effective it will be remains to be seen. Of concern is that integration has been a code word in England for diminution of oversight by regulators and cuts. In some instances it has meant no oversight and in several agencies it has translated into chaos and public health disasters. The potential threats and existing threats yet to be mediated remain substantial across all of Scotland: from old industrial areas to relatively remote rural ones – as the example of old water and sewage treatment plants with their legacies of

toxic metals shows [Table 2].

TABLE 2: Toxic sludge across Scotland 2012	
26 toxic sludge sites	
Bareagle, Wigtown, Dumfries and Galloway	Coatbridge, North Lanarkshire
Orbiston, North Lanarkshire	Barrhead, East Renfrewshire
Giffnock, East Renfrewshire	KinneilKerse, Falkirk
Dalderse, Falkirk	Cupar, Fife
Furnace, Argyll	Loch Eck, Argyll
Tiree, Argyll	Torra, Isle of Islay
Craignure, Isle of Mull	Turret, Perthshire
Assynt, 15 miles north of Inverness	Clunas, Nairn
Invercarnie, Banchory	Glendye, Aberdeenshire
Golspie, Sutherland	Londornoch, Sutherland
Savalbeg, Sutherland	Old Calder Works, Caithness
Sanday, Orkney	Big Breck Quarry, Orkney
Westray, Orkney	Wideford, Orkney
Source: Rob Edwards 2012b citing Scottish Environment Protection Agency data	

### SEPA's singular role

SEPA wishes to adopt 'proportionality and flexibility' but these terms are poorly defined in the May 2012 consultation. Of great concern is the re-prioritisation of SEPA's aims with its objective of "balancing environmental protection with the interests of those who depend upon it for their prosperity and quality of life". Whilst it is to be hoped that multi-agency collaboration and communication occurs, such balancing could be construed as a charter for some interests to do as they please.

SEPA is the single agency that should prioritise environmental protection and operate clear enforcement of laws that safeguard the environment. That clarity and that enforcement should ensure no confusion about environmental protection. Without it, there is potential for enormous erosion of environmental standards and exploitation by the rich and powerful of the vulnerable.

It would be a truism that everyone supports 'simpler, more effective and more joined up procedures' but these can all too quickly turn into weaker, less effective and more biased procedures' that benefit the few and not the population as a whole and the environment.

Advocates of greater flexibility argue it is, by itself, the way to achieve better environmental protection. The term reflects the ideology of 'better regulation' which is not evidence-based. Flexibility may be a good thing or it may be a woolly and confusing concept that leads to less effective enforcement, poorer environmental protection and the potential deterioration of public health. The shortcomings of greater flexibility have been demonstrated in ill-thought out policy changes in England's NHS, social care and education systems linked to lax regulation and putting profits before people [Lee and Beech 2011].

'Proportionate action' is also often advocated but rarely properly defined or explained. It forms part of the deregulatory argot in use in England where it has come to mean soft regulation rather than effective regulation.

Seeking a simpler regulatory framework, one objective of the SEPA consultation process, is eminently sensible if it works. Looking to make the best use of resources in regulation is again an admirable objective if clarity, enforcement and accountability are ensured. How this is to be done needs both a full explanation and careful consideration and very careful evaluation.

SEPA produced a valuable set of papers looking at the economics of environmental regulation that explored the complexities of the subject and the problems and possibilities of accurately assessing the costs and benefits of a range of environmental



controls [Le Roux et al 2008]. Historically, regulatory impact assessments have shown the benefits of some regulations when subtle as well as crude health indicators are adopted, for instance in the US lead in petrol controls [Le Roux et al 2008:pp26-7].

How SEPA's approach "accommodates innovation by taking reasonable account of risk and flexibility in dealing novel and unproven activities" is a critical issue and requires significant explanation. SEPA does not appear to espouse the precautionary principle in its recent documents. At the same time, the Westminster government and some agencies that work in Scotland but are accountable to Westminster are pushing education and other programmes to deal with 'risk aversion' as a priority, whilst working through the economic and related public health damage caused by risk takers in unregulated markets. There may be important lessons for Scotland to learn in these events.

The precautionary principle as outlined by the European Environment Agency [EEA 2001] should underpin SEPA's approach to both risk and novel and unproven activities that may impact on the environment. There are indications, for example, that nanoparticles could cause serious damage to humans and the environment, and have been referred to as 'the new asbestos'. The alternative to a precautionary approach is a 'give the toxin the benefit of the doubt' approach, with the potential for huge human and financial costs.

SEPA's current proposals for a 'targeted, risk-based approach' to tackling problems such as serious environmental crime that do not fall under any of its current charging schemes is unacceptable. Regulation of serious environmental crime should not be dependent on fundraising activities. It should be a base-budget, fully funded law enforcement activity. This is implied by SEPA but it does not say that the funding should be 'sufficient' to do the job properly, rather than as an inadequate level of funding allows.

SEPA appears to be building on its Better Environmental Regulation consultation in 2011. It should again be noted that the Better Regulation policies and principles that emanate from Westminster and appear to have a strong hold in Scotland are simply not evidence-based. They reflect a particular ideology that was responsible, through 'better regulation' policies and practices, for the economic disaster of the late 2000s and in the eyes of many publics is totally discredited.

Business-friendly and banker-friendly in these settings has meant public-hostile and has delivered an economic crisis. This assessment would exclude responsible business sectors, of which there are many, but effective regulation is needed for the irresponsible. This not only serves to control and penalise the bad actors, but to protect those responsible businesses from being under-cut by the rogues.

SEPA's desire to establish an integrated framework for its enforcement work is eminently sensible. If, however, it is based on Westminster's better regulation thinking - and its explicit reference to the principles of Better Regulation indicate that it is it will be - it will usher in a toxic and catastrophic mix of soft and so-called responsive and smart regulation, cuts and staff reductions.

In a division of responsibility, employers, industry and government as sources both of pollution and sustainability should bear far more than individual citizens. This should be made clear in what SEPA does. If it is going to be flexible and effective, it needs to target the major threats to and sources of pollution. These will not come from individuals but industries and employers. There should be a legal, ethical and moral framework that informs SEPA's decisions.

The SEPA aim of establishing simpler and more consistent procedures is worthy. SEPA now proposes a sector/activity hazards assessment for the fields it regulates. This is better than some of England's agencies that are simply looking at sectors. However, the methodologies to be used in such a ranking need to be made available prior to any such scheme being adopted. The processes too need to be entirely transparent and engage with all stakeholders effectively, not simply business interests. SEPA should also

provide examples of where current and past enforcement linked to legislation has been 'disproportionate' and why.

The term 'proportionate', a key feature of the Scottish Government's better regulation strategy – it says its strategy to enhance Scotland's competitiveness involves 'Championing the five principles of Better Regulation - Proportionate, Consistent, Accountable, Transparent and Targeted' - has been captured by the deregulatory lobby groups and is often used as code for lowering necessary and effective enforcement.

Additional information about which stakeholders have claimed they face disproportionate compliance burdens, which have not and how feedback from stakeholders was assessed for accuracy and weighted is necessary. The meaning of 'flexible enforcement provisions' in the SEPA reform plan requires further explanation and clarification before any change in enforcement regimes occur. Using problem solvers rather than rule followers can lead to better and more effective enforcement but, where rules are unclear or eroded, the opposite effect may result.

It would be prudent to pay heed to the lesson of the 'black swans', those low probability but devastating impact disasters which are difficult to shoehorn into these hazards assessments, inviting instead a cross-your-fingers-and-hope form of hazard assessment. While environmental and workplace safety agencies planned for the routine in the US, routine activities were dramatically curtailed after 2010's Deepwater Horizon disaster as resources were diverted to the Gulf of Mexico. The costs to BP ran to billions.

In the UK, the Buncefield explosion and fire led to a major diversion of resources in HSE and the Environment Agency and produced a bill in the region of £1bn, before rebuilding. Scotland has deepwater oil extraction activities, like Deepwater Horizon, and oil facilities like Buncefield. The March 2012 blow-out on the Elgin gas platform about 150 miles (240km) off the coast of Aberdeen, which led to the withdrawal of all 238 workers, shows Scotland has no room for complacency [Total webpage].

### **What should SEPA do?**

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Simplification of SEPA's enforcement regimes, proposed in the 2012 consultation, is worthwhile if there is no weakening of necessary environmental protection. However, it is unclear that, where separate permissions are needed, a single set of procedures will be able to ensure the same level of oversight and enforcement and will not weaken monitoring and surveillance.

Without a significant commitment to environmental justice and the staff, means and resources to ensure Scotland's most vulnerable communities have an effective voice on environmental protection, it is difficult to envisage how 'simpler and flexible advertising and consultation' will work and ensure the greater effectiveness of public engagement.

SEPA runs the danger of being badged with responding to business interests and neglecting those of wider publics. This assessment rests partly on the influence the Scottish Better Regulation Group's Regulation Review Group (RRG) has had on the ideas underpinning this consultation that SEPA openly acknowledges and on SEPA's own input into that group.

RRG contains no community or environmental input -although consumer and employee interests are present - and appears to purposely exclude such groups. Community-based environmental justice groups do exist in Scotland and give a voice to some of the worst affected and most disenfranchised groups in the country. If SEPA wants to ensure "greater effectiveness of public engagement", it should engage with these groups, including giving them formal status and rights within and across all of SEPA's existing consultative and board processes, as well as on the board itself. This would be in addition to international environmental group board membership and would ensure SEPA also reflected local community interests of those affected by pollution and environmental degradation.

The 2012 consultation on SEPA's role makes wide-ranging proposals to revise its enforcement approach. A shift to more 'risk-based' permissioning structures and more voluntary partnerships are major components of the new strategy. It is approach not based on evidence of efficacy, but on managing an agency already donning the better regulation handcuffs, requiring a retreat from inspection and enforcement.

SEPA compliance assessment reports for 2011, published on 3 September 2012, reveal how the agency has cut back drastically on inspections. SEPA visited 1,384 fewer sites in 2011 than in 2010 (2,691 compared to 4,075). Amongst those not assessed in 2011 are 99 working fish farms, waste, vehicle recycling and transfer stations, petrol stations, distilleries, sewage plants, mineral plants and quarries [SEPA 2011].

SEPA enforcement has followed a similar downward trajectory. In 2008/09, SEPA initiated 352 enforcement actions. This fell to 240 in 2009/10, recovering slightly to 273 in 2010/11. The number of samples from rivers fell from 16,710 in 2009 to 12,410 in 2011 [Sunday Herald 6 May 2012].

There are serious benefits to be gained from inspections, and serious implications of failing to undertake them. The 2009 Scottish Government report, 'Overview of costs and benefits associated with regulation in Scottish agriculture', described the outcome of pollution prevention and control (PPC) inspections undertaken at intensive agriculture units seeking permits by a deadline of the end of January 2007. These SEPA inspections "found pollution occurring at 25 per cent of the sites. This pollution was associated with inadequate slurry storage, run-off from contaminated yards, the discharge of wash water from cleaning and disinfection operations, leaking oil storage facilities and feed spillages. Six sites had odour issues and between 20-25 per cent have failed the initial screening for ammonia impact' [Virtue and Morris 2008].

"The inspection results show that there is considerable potential for improvements in environmental performance through the PPC regime; prior to the PPC inspections these sites had not been visited by SEPA staff." [Scottish Government, 2009]. If it takes the better regulation route, SEPA risks further institutionalising a see-no-evil approach, and failing to realise the "considerable potential for improvements" offered by a proactive and potentially preventive inspection regime.

In fashioning an alternative to proactive inspection and enforcement activity, the 2012 consultation on a new legislative framework for SEPA proposes "a single, proportionate and risk-based permissioning structure." This and other proposals should be gauged in the context of a loss of the more effective and preventive enforcement functions, and their replacement with a combination of self-regulatory systems and after-the-fact reactive inspections coupled with possible enforcement action.

A good case can be made by SEPA for joined up permissions. However, it is unclear what SEPA's flexible permissions are or may come to be. Who will monitor and assess or understand what SEPA flexibility means in this context and who assesses how this impacts on consistency in enforcement policy?

Where environmental crimes are concerned and prosecution or other enforcement action would normally be the responsible action of a regulator, flexibility could only lead to a pressure to move away from enforcement activity, with a consequent loss of accountability and a denial of justice. Criminal breaches of the law, with damaging consequences for both health and the environment, should not be consigned to a series of negotiations with the transgressor at the expense of sanctions that would more effectively command the attention of the boardroom and other potential polluters.

The SEPA proposal to provide permits at corporate level begs many questions, especially in the light of major failures of governance by corporations and the multiple and well documented failures and poor general regulatory record of, for instance, the oil industry and specific companies within that industry such as BP.

The USA Chemical Safety Board on 24 July 2012 flagged up failings in BP's corporate structure and governance as well as systems that led to disaster in specific plants and enormous potential for environmental pollution [CSB 2012].

Such failures serve as warning against issuing blanket corporate permits in any field. There could be a perception that SEPA is being led by the type of regulatory thinking that comes from the finance and banking industries, an approach that along with Enronisation has been catastrophic. Earned autonomy, de facto, in environmental protection and related areas has simply failed. Historically too, voluntary schemes have been tried in the environmental and public health fields – they preceded the introduction of many regulations and regulators – and they failed.

It is unclear how corporate level permits would work in terms of addressing particular company and plant level activities. The system is one that inevitably leads to closing the stable door after the horse has bolted - for instance by issuing permits that 'reflect the positive environmental performance of an operator'. What happens if this deteriorates or if part of a corporation, company or plant breaches environmental regulations and creates environmental threats? Or is more hazardous tasks are outsourced and the paper trail and evidence of associated problems goes off site? [Institute for Work and Health, 2012]. How will inspections function in enterprises granted permits in favourable circumstances? How will light touch regulation affect SEPA in terms of staff and resources and will failures in such regulation be capable of being redressed in the organisation at a later date?

Without answers to these questions, the SEPA proposals look fraught with danger and too high risk to pursue. Multinationals headquartered outside Scotland would also provide some organisation limitations on problems.

The low fixed financial penalty now suggested in the SEPA consultation seems to place a disproportionate burden on the individual. £500 could be over one week's wages for an individual; £1,000 is a vanishingly small and insignificant penalty on any sizeable firm. The cap on the higher financial penalty of £40,000 proposed in the consultation is a fraction the average fine for the most serious workplace safety offences; even the average fine for these offences is in the region of £25,000. Why set the ceiling so low, if the purpose is to achieve justice and deterrence? The instances identified by SEPA where these penalties may apply to potentially serious breaches with significant consequences for health and the environment are unclear.

Further questions are also raised about the decision-making process outlined in the consultation with regard to 'significant environmental harm' and what does and does not involve 'little or no blameworthy conduct'. The grey areas here may entail time and resources to resolve and monitor. Additionally, to what extent will the damage done be assessed and will voluntary undertakings and remediation, equivalent or otherwise, balance such damage? What appears to be a quick and flexible measure on paper could prove in practice to be the opposite.

SEPA's proposed voluntary reparation scheme appears relatively untested. The compliance and engagement spectrum is not a credible legal model. Egregious criminals may be at one end of the spectrum, but opportunists, the careless and the confused - who SEPA would argue have the means to access information to leave them clear about their responsibilities - are criminals too. Effective inspection and enforcement regimes targeting irresponsible players are also practicable ways to reward good players. What rewards does SEPA envisage bestowing on the 'champions' it wants to recognise? How would SEPA establish the company was in fact anything other than a paper champion?

SEPA's ideas for publicity orders will be useful. Reputational damage is a strong lever affecting board level behaviour and shareholder responses. SEPA's direct measures proposal will also contribute to more effective enforcement but the cap of £40,000 is too low and the penalty should not be limited if the costs and consequences of the breach of environmental regulations exceed that sum.

It is important to maintain due process. However, if direct measures could be significantly delayed by this extensive appeals procedure and the costs in terms of staff time and financial resources involved in defending actions could prove costly, then a

simpler, less easily contested and more direct legal mechanism may be preferred.

The SEPA concept of 'knowingly causing harm' may prove difficult to interpret and what are sometimes described as 'acts of god' are either preventable or capable of control that would reduce damage. Additionally systems of work and technical solutions should be capable of addressing 'many acts of god'. Recent example would relate to sewage or contamination of water supplies where buildings are erected in flood plains. It may be difficult to predict the flooding but the risk and consequences would be clear.

In Japan, the damage done by the March 2011 tsunami – which could not be predicted but was known to be possible – to nuclear plants, including meltdowns in reactors at the Fukushima Daiichi nuclear plant [IAEA Fukushima Monitoring Database], could have been ameliorated through planning, design maintenance and management of the plants.

The term 'knowingly causing harm' would also appear to include crimes of omission – so failures made in blissful management ignorance, however lamentable and irresponsible, could fall outside the scope of the law. Ignorance, as lawyers would usually tell us, is or at least should be no defence.

An introduction of such an offence cannot be justified. The courts are capable of determining the level of responsibility for breaches of regulatory requirements as the law now stands. There are also other distinctions that would be more useful than 'knowingly cause harm': for example the US use of the term 'wilful' breaches which attract significantly higher penalties. For other breaches, where acts or omissions are the cause, the test is foreseeability.

Widening options for remediation as an alternative to 'punishment' infringes principles of environmental justice. It appears to be moving environmental crimes into the same category of other white collar crimes in the financial sector and fraud elsewhere. It is difficult to comprehend why a woman who steals a can of beans may end up in prison whereas a business fraudster who takes millions may not, or a fishing boat owner involved in a £million black fish fraud remains free.

Environmental crime should be regarded as serious crime. Cost recovery, if it clear that monies recovered are 'hypothecated' for environmental improvements only, may prove a worthwhile mechanism if it operates alongside and in addition to legal penalties.

SEPA's ideas for a cost recovery approach are good ones. There may be merit in separating investigation costs off as there is some evidence that such charges may affect enforcers as well as those prosecuted and produce unintended consequences, a concern raised by COSLA in 2011 in regard to plans to introduce an HSE cost recovery scheme. COSLA believed cost recovery could jeopardise the good working relationships between the regulator and regulated businesses [House of Commons SAC, 2011]. In some regulatory regimes, large fines and cost recovery have led to lower enforcement activity yet evidence shows that enforcement activity is the major deterrent for those considering breaching regulations.

### **How should SEPA measure success?**

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SEPA is looking for pre-defined specific and measurable results in its proposed new regulatory approach. If this is the principal focus for SEPA, there are major dangers both for the organisation and for the Scottish environment. Such management tools all too often lead to very narrow tick box approaches that meet management targets but fail to deal with the bigger environmental picture. Prevention is also harder to quantify, particularly where other deregulatory measures could be created a deteriorating picture overall.

The 2012 report on the BP Deepwater Horizon disaster by the US CSB [CSB 2012] emphasised the problems created by a narrow approach that missed the bigger picture. CSB has also flagged major governance failures in BP management. There appears to be a conflation by SEPA of two approaches, wanting firm and comparable quantitative



parameters to focus its work while still operating and distinctly less focussed flexible system.

Flexibility and focus are admirable but adopting narrow, pre-defined and specific and measurable results as the sole strategy would appear de facto to lock SEPA into a very narrow management model and administrative system.

The BP Deepwater Horizon disaster produced a response from the US regulator that the company ignored the big hazard and focussed on the minutiae. The risk-based approach now required of regulatory agencies including SEPA can fall into the same trap, with regulators and businesses confused and blinded by a limited set of parameters giving an insight into only a limited range of pre-determined problems.

Major hazards and threats to the environment should be the focus of environmental regulators, but may be viewed as low probability so in some interpretations low risk. These 'black swans', though, continue to occur with alarming frequency.

'Increased partnership' is now a stock alternative to inspection and enforcement activities, and increasingly the go-to tool in a more inspection and enforcement shy SEPA. It should be aware of the limitations of this approach. US regulators have championed these partnerships, which have frequently led to a withdrawal of critical scrutiny and too comfortable a relationship between the enforcer and the enforced.

A creeping imbalance in the partnership can culminate in 'regulatory capture' by businesses with more resources than the enforcer and a monopoly on data sources used to evaluate performance. Ostensibly regulated companies freed from close external scrutiny are left to decide for themselves on the basis of their own data their evaluation what constitutes an acceptable level of safety or environmental risk. It happened in the Gulf of Mexico and it happened at Piper Alpha [Linköping University, 2012].

Companies left to their own devices can and will get it wrong, sometimes with devastating consequences. If SEPA's proposed new regulatory system means that business interests determine the agenda for a confused risk-based approach while ignoring the input and interests of vulnerable groups, it is a recipe for regulatory failure.

The current SEPA consultation does not indicate if it has or how it will obtain 'a robust intelligence capability' to inform its strategic planning process. What resources are available? And what previously prioritised functions would be dropped 'to reassign resources to these priorities'? If the outcome is SEPA becomes more adept at requesting paper reassurances from companies, we have just generated more paper to keep more SEPA staff a safe distance from workplaces and anchored to their desks.

There are countervailing forces at work, with attempts to commodify the environment along the lines of financial and social capital at the same time as those models are being discredited by the failures of markets and regulation on a global scale.

What exactly 'service enhancement opportunities' are and why they would be pursued by SEPA is unclear, but they are part of SEPA's plan. Again, 'public engagement' is not being integrated in the approach, but incorporated at the whim of SEPA. It should form a core part of all SEPA processes. External scrutiny is also a necessary check on the relationship between the enforcer and the enforced.

Having a clear permissioning framework, as SEPA now proposes, would be helpful. Too much flexibility, however, could mean a lack of clarity in the framework, confusion amongst SEPA staff, users and businesses, and could cover up potentially important failures in the enforcement system. It could also create a non-prescriptive approach more vulnerable to political interference.

A targeted approach based on high quality hazard identification linked to precautionary principles that are weighted in favour of public health and environmental protection has much to commend it. This weighting should be reflected in the aims and objectives of SEPA. However, SEPA's view that proposed changes should 'support an approach which

can accommodate innovation by taking a reasonable account of risk which is flexible enough to deal with novel and unproven activities' is potentially dangerous.

The terrain around this enforcement approach is highly contested and whilst bodies such as the European Environmental Agency have provided both details and worked examples of how a precautionary approach might operate, 'flexible risk assessment' as proposed by SEPA is a scientific, technical and legal minefield and in the past has failed to work. It has proved to be a recipe for 'capture' of the regulatory process, where enforcers have to accept data provided by the company unchallenged [Linköping University, 2012].

It must be recognised by SEPA that necessity is the mother of invention, and regulation and a realistic prospect of enforcement action is a demonstrable driver of innovation. A case in point would be the current nanotechnology goldrush. Public expenditure on the development of the technology has massively outstripped research on potential adverse environmental risks. How would SEPA make informed 'risk-based' decisions on 'unproven activities'? The two objectives are mutually exclusive. Stronger regulation and enforcement could stimulate both better health evaluations and control measures, and possibly the development of inherently safer alternatives.

SEPA has an opportunity to embed key environmental principles in its environmental regulatory framework - precaution, participation, effective enforcement, environmental justice and accountability. A framework that contained such clearly enunciated principles would make Scotland a global pioneer in effectively regulated, sustainable and prosperous environmental development. A lack of transparency and accountability are problems evident in SEPA's new look enforcement guise. The public needs to see SEPA is going its job effectively and SEPA should both be capable of and willing to demonstrate it is doing its job well.

## Section 8

### The ICL/Stockline case study

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Current HSE activity needs to be assessed against the backdrop of both the ICL/Stockline plastics factory disaster in 2004 with its nine deaths and dozens of injuries and the Legionnaires' disease outbreak in Edinburgh in 2012. One HSE proposal in 2011 for its manufacturing strategy was to list plastics factories in a low risk grouping because of the existence of an unevaluated and relatively new tripartite body, stakeholder engagement and the HSE-declared lack of the need for pro-active inspections. ICL/Stockline and similar small factories in Scotland in 2012 would almost certainly have fallen through the pro-active inspection regime of HSE. As an explicit matter of policy, under current HSE enforcement rules, the safety watchdog would not have visited Scotland under after the blast.

What lessons does the ICL/Stockline disaster provide for HSE now? They relate to enforcement of existing regulations, trained and supported staff, regular inspections with necessary and careful follow up. These are linked to issues around inter-agency working too. They also reveal the failure of judges to examine the records of bad employers in sufficient depth to ensure justice, both legal and financial. To view the death of nine people as down the lower end of blameworthiness does not indicate that the Scottish judicial system will ensure justice for those killed or maimed at work.

HSE inspectors visited the plant and identified and flagged failings linked to the gas supply that led to the explosion but no effective enforcement action was taken that addressed these failures. Of ICL, a judge, who fined the companies involved £400,000 noted:

- "Further, although the companies have pled guilty to failing to make suitable and sufficient risk assessments and no risk assessment addressed the underground pipe, the companies did carry out risk assessments for other aspects of their operations.

Accordingly, whether or not the Advocate Depute was correct to use the word 'negligent', I would regard the blameworthiness of the companies as being towards the lower rather than the higher end of the range".

- "This is not a case of failure to heed warnings or where a decision was taken to run a risk in order to save money. The companies apparently have a good safety record prior to May 2004, going back to the 1960s. In the circumstances I am satisfied that there was a prompt admission of responsibility and timely plea of guilty. There has been no need for a trial and, while at one stage a trial remained a possibility, its scope was severely restricted by the company's admissions. In relation to the allowance to be made for the pleas of guilty. Notwithstanding the current practice which is based on the guidance given by the Criminal Appeal Court in *Du Plooy v HMA 2003 SLT 1237* I do not intend to ascribe a specific discount in respect of the pleas. I regard them as an important mitigating factor which I have had regard to but it would not be an accurate reflection of the way that I have approached sentence to suggest that I have applied a specific arithmetical discount".

Evidence existed that the judge either did not have access to or did not cite. Over a decade or more prior the blast, at least 13 ICL employees attended the Western Infirmary for emergency treatment. In addition there were at least six over-three day incidents. The injuries sustained at the factory suggest a poor safety record for a relatively small undertaking. A worker's complaint about health and safety management at the plant was made to HSE in 1999. HSE issued an improvement notice and two notices early in the 2000s. In 2003, HSE visited the plant again in response to a request from an employee. HSE was alerted to poor safety practices on two occasions by employees in the five years preceding the disaster.

SEPA is responsible for pollution prevention and control, and for the investigation of environmental protection laws and enforcement of breaches of those laws. SEPA is likely to be involved in factories where there are chemicals and substances being used or stored that may present a risk of major hazard, or if the release of chemical or the use of substances such as asbestos is likely to present a danger to public and environmental health outside the factory.

The only work carried out by SEPA in connection to ICL/Stockline in Maryhill appears to have begun and ended on the 11 May 2004, the day of the explosion. On this day, SEPA gave the emergency services permission to remove "special waste" [asbestos] before the necessary three day notification period. It also advised the emergency services that asbestos waste could be safely stored overnight in the containers they proposed to store it in and that an asbestos removal company would be able to dispose of the waste.

A public health consultant asked whether or not SEPA would investigate the site retrospectively to establish if the activities undertaken by ICL Plastics required some level of authorisation or not. SEPA was not involved in the wider investigation into the disaster. In a Freedom of Information response dated 13 June 2005, SEPA notes that, "[T]o date SEPA has not received a report on the explosion from the HSE nor a request for input. The HSE is the lead enforcing authority for the Stockline Plastics site as there has been a serious accident resulting in fatalities. We have not investigated retrospectively whether the activities undertaken by Stockline Plastics at the Maryhill site fell under legislation for which SEPA enforces. Our interest in such a site would be in relation to pollution control matters rather than health and safety which is the remit of the HSE."

It is very rare for SEPA to conduct joint investigations with HSE into such incidents. Perhaps more significantly, given the joint interest that those agencies have (for example both agencies are jointly responsible for enforcing some regulations such as COMAH) it is rare for investigation information and information that relates to enforcement activity and prosecutions to be passed between the agencies [Tombs and Whyte, 2007].

ICL/Stockline provides a good example of the importance of closer collaboration

between regulatory authorities. The explosion involved potential hazards to public health and environmental safety and SEPA were required to give advice on those hazards to the emergency services. Yet SEPA apparently had no records on the chemical and substance hazards that might be contained within the site. SEPA would certainly have been in a stronger position to offer advice had it possessed some prior knowledge of the factory.

Failures in enforcement of existing regulations and failures of the court to ensure justice for those injured and for the families and friends of those killed graphically illustrates why.

Scotland needs both regulation and effective enforcement. The role of agencies such as the HSE in Scotland in inspecting, regulating and enforcing health and safety laws has proved limited and inadequate in an agency lacking leadership, staff and resources as well as powers to do their job. The role of the HSE in inspecting all aspects of the plant that merited attention and effectively enforcing the legislation, on the basis of the employees' accounts, has been highly problematic.

The report was critical of the UK government's deregulatory plans, noting the key problem with the regulation of ICL/Stockline was that the company felt no regulatory burden at all. Indeed, the authors reported that the evidence led them to the conclusion that in the absence of strong workforce representation, Stockline was a company that could have been incentivised into compliance only with regular HSE visits and regulatory interventions [ICL/Stockline Report 2007].

The problems persist in Scotland in 2012 and the solutions proposed remain equally valid in 2012 too. Contrary to the current direction in government policy, HSE should be adequately resourced and empowered to conduct its duties. At a minimum, we propose:

- HSE is funded to a level sufficient to ensure that each workplace employing 10 people or more can expect at least one inspection per year.
- A review of how HSE Scotland and the HSE in the UK operate, beyond the deregulation-framed briefs of recent UK government commissioned reviews.
- An urgent need for sufficient inspectors with the time, resources and training to inspect, monitor and effectively enforce the laws in factories like Stockline.
- There may be a powerful argument for the HSE field inspectorate to be devolved rather than reserved in Scotland to ensure full national accountability and scrutiny, something opposed by the Commission on Scottish Devolution [House of Commons SAC, 2011]. However, HSE's functions have been wholly refashioned by the UK coalition government in the last two years. The issue merits a fresh review.

In its examination of the failings of BP in the Texas City explosion and Prudhoe Bay incident, the US Chemical Safety Board (CSB) was quite clear about a number of factors. Then CSB Chair Carol Merritt told the US House of Representatives committee on 16 May 2007 of comparisons of safety culture similarities in the two incidents. Both investigations, she said, found deficiencies in how BP managed the safety of process changes. In Prudhoe Bay, BoozAllen Hamilton found "a normalization of deviance where risk levels gradually crept up due to evolving operating conditions."

At Texas City BP refinery: "Abnormal startups were not investigated and became routine, while critical equipment was allowed to decay. By the day of the accident, the distillation equipment had six key alarms, instruments and controls that were malfunctioning. Trailers had been moved into dangerous locations without appropriate safety reviews," the chairperson said. Other common findings at both Texas City and Prudhoe Bay included: "Flawed communication of lessons learned, excessive decentralization of safety functions, and high management turnover. BP focused on personal safety statistics but allowed catastrophic process safety risks to grow."

Without active regulatory inspections in sufficient depth, proper enforcement, adequate numbers of trained inspectors, employees, the public and businesses will not be protected effectively. The failings of BP were highlighted on a global stage but effective enforcement action did not follow and the identified failings of BP continued and led to

the Deepwater disaster in 2010, with enormous occupational health and safety and environmental pollution consequences.

## Section 9

### The Edinburgh Legionnaires' disease outbreak case study

The 2012 Legionnaires' disease outbreak in Edinburgh threw up a number of major questions about how both workplace occupational health and wider environmental health was being protected and what the consequences would be if regulation and enforcement failed. The outbreak had claimed three lives by early July 2012 with some 100 confirmed and suspected cases reported [Herald 12 July 2012]. Whilst the source of the outbreak has yet to be identified, reactive inspections by enforcement officers from both HSE and local authority environmental health departments identified significant failures in control measures and health and safety management systems in several cooling towers in the area.

The outbreak highlights the failures by some businesses to protect the public health, their own employees' health and the health of employees other than their own working on at or in the vicinity of the businesses or passing through the area. It further flags the failure of the regulatory and inspection regimes to monitor those who threaten public health and enforce existing law and codes effectively.

HSE has in some respects already admitted this failure. HSE has also acknowledged in a 27 July 2012 safety notice that "key aspects of the proper management of the risks from legionella" have not been addressed because "a recently completed review of outbreaks in the UK over the past ten years...shows common failings in control, and a potential risk of further legionella outbreaks, such as that in Edinburgh in June 2012" [HSE 2012b].

This is again against a backdrop of wider cuts in the government body, which has seen HSE in the 30 years from 1982, when it had 60 occupational health doctors and 62 nurses, reduced to fewer than three full-time equivalent doctors and a handful of other occupational health support staff. Such advisers, along with HSE technical services, must have an important part to play in the work of environmental and related wider environmental control and prevention of conditions such as Legionnaires' disease.

The HSE reported, following information requests from *Environmental Health News*, that apparently HSE legionella inspections had risen to 2009 from some unspecified date but that the total level of pro-active inspections – excluding those by the Office of Nuclear Regulation – fell from 833 in 2009 to 464 in 2011 whilst the number of legionella inspections at cooling towers dropped from 237 in 2010 to 134 in 2011 [Williams 2012]. Also, according to the HSE, there were approximately 5,800 notified cooling sites in the UK. HSE was responsible for inspecting around 2,900 of these and local authorities inspected the rest. According to recent HSE research, 90 per cent of outbreaks over the past 10 years were caused by businesses failing to identify risks and implementing effective control schemes. This of itself exposes a failure of oversight. A failure to undertake simple risk assessments is a criminal breach of the law.

Equally important may be the cuts that environmental health officers (EHOs) have experienced in recent years, due to an economic crisis created in large part, lest we forget, by financial deregulation over the last 20 years. In Scotland, a Royal Environmental Health Institute of Scotland survey earlier this year found that between March 2009 and 2011 there had been a 9 per cent fall in EHO numbers, down from 556 to 506 [Watterson 2012b]. This 10 per cent cut accelerated the gradual long-term decline in EHO numbers in Scotland, which by 2011 had fallen over 25 per cent from the 1985 figure of 677 EHOs serving the country's 32 local authorities.

Prospect warned that the Legionnaires' outbreak highlighted the risks of cutting back on proactive inspections. "It is a stark reminder of the danger of denigrating health and

safety at work and the value of effective inspection by the HSE," said Simon Hester, the chair of the union's HSE branch [Edwards 2012b]. This analysis is supported by recent work at Harvard that shows the benefits of workplace inspections [Levine et al 2012]. The chief executive of the HSE in contrast asserts that there is 'no correlation between outbreaks of legionella and the number of inspections carried out by the regulators' [Podger 2012].

This is against the backdrop of HSE's own safety notice pointing to failings in how companies implement legionella controls and the work of HSE's own inspectors in Edinburgh who found multiple breaches of the health and safety codes sufficient to merit the issuing of improvement and other notices). There are clearly strange conceptions of public and worker protection at work at the top of regulatory agencies.

At the same time, the UK government's deregulation agenda is running with proposals to cut or change advisory codes of practice including one on legionella. This begs the question of whether splitting the legionella code in 2 as proposed will improve or reduce flow of information and understanding of the legionella workplace and wider public health threat? Additionally how much HSE staff time and salary and related costs will be spent by HSE on both the consultation and related later actions on the legionella ACOP and other codes– from not changing to changing?

HSE should be spending more of its time and resources on inspection and enforcement rather than bureaucratic work linked to deregulatory programmes. It further begs the question of how confident HSE can be that 'low risk' premises really are low risk when legionella presents a public health as well as a worker threat? And how does HSE define 'proportionate low risk' exactly? The current HSE line is to lower activity on low risk premises – A is high risk and D is lowest risk. This would mean for example that the plastics industry is being proposed by HSE as Category C and would not have active inspections so companies like ICL/Stockline would now fall into the low risk category.

If the message is being sent out that technical advice should not be confused with regulatory requirements, does that square with HSE and EHO experience of what is going on with regard to poor application of cooling tower controls for legionella in some companies, workplaces and public places? Also would HSE field inspectors now support splitting the code or not? Has the HSE done a cost/benefit analysis of the Edinburgh Legionnaires' disease outbreak? That is – what would the cost have been of having more activity within the HSE on legionella and more inspections and earlier enforcement against the costs of trying to control the outbreak once it occurred?

The human and economic costs of the legionella outbreak in terms of death and illness and distress cannot yet be calculated. The HSE should identify the economic costs of the outbreak in terms of their time and resources, the economic costs to the NHS in the primary and acute sectors with regard to care and treatment, the indirect costs with regard to filling of beds in intensive care units, overtime, lost time of those ill who work in a range of employment settings and so on.

All too often such costs are not counted and are externalised by bodies such as HSE and employers with the public paying the economic and human bill directly through injury and death to individuals and indirectly through taxes to support services to treat those damaged by inadequate and ineffective regulation.

## Section 10

### Conclusions and recommendations

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Regulation and enforcement of workplace and environmental standards are there for a reason – to protect workers, communities and the places we live from damage and degradation. These protective measures are under unprecedented attack. The business lobby and the governments of both Scotland and the UK have argued, to differing degrees, that regulations and enforcement have put a break on economic



recovery and have frustrated job creation efforts and innovation. While the rhetoric against regulation is strong, the evidence base for it is weak.

By contrast, a long history of successful regulation has delivered safer, healthier workplaces and greatly improved environmental conditions. It has also exposed the dubious techniques used by those opposed to regulations. Over decades, sections of industry have lobbied to have these legislative controls eased or new measures not introduced in the first place, and have presented cost arguments to support their case. This report finds these vested interests have routinely over-estimated compliance costs while disregarding the benefits. In a self-destructive display of economic short-sightedness, these skewed costings have also ignored the substantial benefits to industry of decent workplace health and safety and environmental regulation, properly enforced. A genuine level playing field, where the responsible are not undercut by the rogues, is in the best interest of businesses and the wider community.

In health terms, the moral argument for preventive measures backed by effective regulation is supported by an equally compelling economic case. Cost-shifting means bad businesses pay only a minority of the costs arising from their environmental and safety abuses, with the lion's share born by society as a whole. Health impacts related to preventable occupational and environmental exposures are substantial and are an inordinate drain on the public purse through health and welfare costs. The largest price – in both financial and human terms – is born by individuals and their families. It is a travesty that in a modern and wealthy society, sections of the population still lose years off their lives to wholly preventable risks.

The fact that deregulation – in its many guises including 'better regulation', 'smart regulation', 'responsive regulation' and 'risk based regulation' – is finding favour with legislators exposes the privileged access of the business lobby to these lawmakers in England, Wales and Scotland. It also confirms the failure of current systems to involve through community councils, related bodies and workplace-located trade union groups the other 'stakeholders', principally the public who suffer the health detriment. Nobody asks to develop an occupationally- or environmentally-caused disease, but many thousands develop them.

If Scotland is to address these grievous inequalities and inequities it needs to develop different and fairer approaches that better reflect its displeasure at abusive environmental and workplace health and safety practices and its support for the communities suffering as a result.

### **A distinctive path for Scotland?**

In a number of countries, regulations have been passed to bridge gaps in protection for employees and publics that will address these health inequalities and environmental injustices and also help to cut costs to the health and other services of ill-health and injury due to poor working and environmental conditions.

Instead of framing the argument in terms of 'burdens on business', responsible lawmaking should consider 'burdens on society'. This would encompass protecting good businesses but also protecting vulnerable communities and employees. It would ensure current laws were obeyed and new laws would find a more rational, systematic way to improve the quality of work and the environment. All of this is possible, and all of it is existing practice elsewhere.

The UK Gangmasters' legislation, which is currently under attack from the UK government, has helped protect some of the most vulnerable in society. Massachusetts in the USA is introducing legislation to "prevent unethical temporary employment agencies from exploiting temporary workers and undermining law-abiding businesses". And Toxics Use Reduction legislation has brought benefits to employers, employees and the public through reduced work and wider environmental exposure to a host of toxic substances. The European Union-wide chemicals regulations, REACH, too - with its health impact as well as regulatory impact assessments - has produced considerable

human and economic benefits.

'Roving safety reps' and 'green reps' in the workplace can harness the skills and training provided by unions both in their workplaces and across the community. Not only would it expand the oversight provided by official agencies, it would improve 'stakeholder' participation.

To achieve many of these changes, would require Scotland to control its own policy and systems of oversight, rather than be constrained by a financial and political straitjacket imposed by Westminster. In 2011, a swathe of official enquiries looked at the possibilities. These have included Parliament's Scottish Affairs Committee, the Scottish Parliament's Scotland Bill committee and a Department of Work and Pensions enquiry. Evidence from elsewhere in Europe – Norway, Sweden, Denmark and Finland – indicates that Scotland is quite capable of introducing its own agencies in these areas and prospering.

The Scottish Minister for Public Health has accepted that healthy working lives can boost the economy [Matheson 2012]. However, unless there is a strong commitment from the Scottish government to regulating and inspecting workplaces to ensure workers are safe and healthy – a strategy that goes well beyond health promotion – this will not be achieved.

Legislation in Scotland to provide compensation on pleural plaques, to bring an end to much of the harm caused by passive smoking and to provide protection from dangerous dogs, left the rest of the UK in its wake. The country could achieve similar gains if it was in a position to take the initiative on occupational and environmental health issues. Both the economy and the public health could benefit.

## Recommendations

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The Scottish Government should take such measures as are necessary to introduce a fairer system of regulation of workplace and environmental hazards in Scotland, more responsive to those whose health is placed at risk.

1. Agencies involved in enforcing existing environmental and occupational health and safety law need adequate resources. Recent cuts should be reversed, and budgets and staffing reappraised and set at a level that allows far more frequent and probing inspections with an expectation that criminal breaches will result in enforcement action.
2. Policy in Scotland to address occupational and environmental risks must have a component dealing with health inequalities, with the active and public support of the Scottish Government. This should include measures to protect vulnerable groups, including temporary workers, those in rural and remote locations, communities facing multiple insults from many pollution sources and workers facing greater risks of occupationally- and environmentally-related diseases. Regulatory practices, including their development, execution and monitoring, should be informed by the active participation of all stakeholders, particularly those placed at risk by potential abuses of workplace and environmental standards and targeted in the environmental context at communities worst affected by pollution.
3. Novel methods of workplace and community participation should be developed, as well as new methods for assessing how communities and workers are disproportionately affected by their work and environment, to harness local skills and knowledge. These should include a consideration of options for introducing legally-empowered trade union 'roving safety reps' with a regional role, encouraging more workplace green reps with an expanded role and establishing environmental justice advocates located in communities to liaise with SEPA and EHOs.
4. Deregulatory policies and practices should be abandoned and reversed. The drift towards more voluntary measures or self-regulation should be stopped.

5. Best practice approaches should be investigated and employed; this could include, for example, the development of approaches based on toxics use reduction, the precautionary principle and better whistleblower and employment protection.
6. Workplace and environmental health and safety regulators should be required to maintain a dedicated focus on health protection, rather than the current trend towards a purpose limited by economic considerations.
7. Systems of justice should be reappraised. Workplace health and safety and environmental criminals should be prosecuted and penalties should be sufficiently punitive to be a deterrent. Systems of compensation for occupational and environmental diseases should be reviewed and made more equitable. Efforts should be made to establish the extent of 'cost-shifting' by businesses guilty of environmental and workplace safety abuses, and this information should be used to inform policies and penalties.
8. Data systems should be improved to provide better intelligence on the causes and extent of occupationally- and environmentally-related ill-health. This information should be used to inform improved, more responsive and more protective policy and practices. Linkages between NHS Scotland and HSE and SEPA must be improved to aid recognition and remedial action on public health threats.
9. Serious consideration should be given to the creation of a Scottish Occupational Health and Safety Agency, controlled from Scotland and freed from Westminster's financial and political control.
10. Scotland should establish itself as a vocal defender of the environment and workplace standards and of the rights and health of its population, not an apologist for Westminster's deregulatory obsession or an evidence-blind advocate of the skewed 'business burdens' argument that transfers risks and costs to the public and the public purse.

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