

Research Report Series

RR 343 - Evaluation of COMAH Regulations 1999 by Risk Solutions

Background

1. Current Cabinet Office guidance requires that all new health and safety regulations be subject to the preparation of a Regulatory Impact Assessment (RIA), which includes a cost benefit analysis. The RIA process ensures that the regulations are monitored and reviewed after they have been implemented.
2. Post-implementation evaluation is intended to test whether the objectives of the proposal have been achieved, attempts to measure how far the anticipated benefits have been realised and whether the RIA cost predictions reflect the costs incurred in practice. Evaluation enables decisions to be reviewed in the light of actual performance, including any changes in the external environment that might have occurred, and a check of whether assumptions made in appraising a proposal were realistic.

The Evaluation

3. Risk Solutions carried out an evaluation of the COMAH Regulations that were introduced in 1999 (with a phased implementation during the period 2000 to 2002). The evaluation considered the period before the most recent COMAH amendments, which were introduced in 2005.

Comments on the evaluation

4. Briefly, the evaluation found no direct evidence that COMAH is resulting in a reduction in the risk of major accidents and suggested that the costs reported by industry exceeded those predicted in the RIA by a significant margin. However, major accidents are rare, so a significant measurable difference in the number of events would not be expected so soon after implementation (particularly as COMAH followed a pre-existing major accident regulatory regime). In addition, the evaluation was based upon a small number of case studies and a

limited telephone survey, and care should be taken in interpreting cost data because of the inherent difficulty in their estimation. Noting the above caveats, the evaluation, while it cannot be definitive, does highlight that some significant elements were not included in the RIA and in so doing, will help to re-shape RIAs in the future.

5. The methods used to gather cost and benefit information are described in section 3.3 of the Report. The evaluation was restricted to 5 case studies. In addition a total of 32 questionnaires were sent out, 9 to top and 23 to lower tier establishments. From the 9, there were 8 responses; each was interviewed by telephone. Of the 23, there were also 8 responses; 7 of the respondents were interviewed by telephone. There are approximately 350 top and 750 lower tier sites subject to COMAH.
6. The Report concludes that the costs reported by industry exceed the RIA predictions by a significant margin, although care must be taken when comparing the evaluation and RIA studies as the evaluation has in some instances examined costs in more detail than the RIA, and in allowing for the difference between the number of sites subject to COMAH and the numbers assumed in the RIA. Quite clearly, the RIA did not include the cost of plant modifications; there is also evidence that the costs of safety report preparation are higher than those estimated in the RIA. With respect to safety report preparation, the most probable explanation is that some operators had to revise and in some cases resubmit their safety reports.
7. The Report makes an important point that there remains a good deal of uncertainty in the costs because many are inherently difficult to estimate, for example due to uncertainty when deciding which costs and benefits can be legitimately ascribed to COMAH, the variation in the experience of different firms and the small sample size. The Report attempted to determine the benefits of COMAH (in terms of reducing accident frequency and severity) based on operators' estimates. However, it became clear that operators' estimates were not meaningful. Health and safety benefits cannot always be quantified - the Report notes this and highlights other benefits of taking

preventative measures to avoid and prepare for major accidents, although it is not always possible to put a monetary value on such benefits. The report includes a sensitivity analysis of the cost benefit of COMAH.

8. In conclusion, with such a small sample size and large uncertainties, the Report's findings cannot be definitive. Further, it is not possible to be conclusive about the impact of the Regulations in such a short time as the events they are designed to prevent are very rare. However, limitations have been identified in the RIA and the Report will help to shape such assessments in the future.