

Managing Issues in the Face of Risk Uncertainty: Lessons 20 years after the Alar Controversy

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Abstract:

Purpose: This paper takes a 20 perspective to revisit the Alar controversy, one of the most hotly argued public issues of the late 1980s, and explores what fresh conclusions can be drawn for modern risk and issue managers.

Design/methodology/approach: The paper reviews contemporary reports and analysis, along with subsequent retrospective opinions from some key participants and commentators, and examines those conclusions in the context of current communication practice.

Findings: The Alar case triggered a major reassessment of risk communication and the role of activists and the news media in amplifying issues. But even today some facts of the case remain in dispute and some of the purported lessons have been blurred by history or appear to have had little lasting impact.

Practical implications: Issue Managers increasingly find themselves defending reputation in the face of public issues which focus on scientific uncertainty, and the Alar case provides vivid examples of both what to do and what not to do.

Originality: While most scholarship on the case discusses the implications for scientists, regulators and journalists, this paper throws fresh light on the case from the corporate perspective of the manufacturer of Alar, and the apple growers who found themselves in the eye of the storm.

Keywords: Alar, issue management, risk communication, food safety, risk amplification

Introduction:

In early 1989, a public health panic sparked by an American television broadcast saw huge quantities of apples and apple juice destroyed and the national apple industry temporarily on its knees. The notorious Alar controversy became one of the most hotly argued issues of its day, triggering a major reassessment of risk communication and the role of activists and the news media in amplifying issues.

Although some people still contest the true meaning of the case, a 20 year retrospective assessment provides fresh perspectives for today's risk and issue communicators when scientific and technical issues are in dispute.

The controversy sprang to prominence in February 1989 when American CBS television's *60 Minutes* opened an orchestrated campaign against the chemical Alar (or daminozide) which was used as a growth regulator on apples to enhance firmness, colour and shelf life and to improve the efficiency of harvesting. On the basis of a report produced by the activist group Natural Resources Defence Council (NRDC), Alar was branded as 'the most potent cancer causing agent in the American food supply' and a particular health risk to children.

In the ensuing public panic, consumption of apples and apple products plummeted and within months the manufacturer, Uniroyal, voluntarily withdrew the product from use on food.¹ Yet debate continues as to whether this was "the result of one of the slickest, most cynical fear campaigns in recent American history" (Fumento, 1993), or whether the campaign against Alar should be seen as "an icon of hope to which future generations will owe an enormous debt" (Fulwood, 1996).

This paper does not attempt to evaluate the technical evidence for and against Alar (see for example Marshall, 1991; Finkel, 1995; Moore, 1989; Rosen, 1990), but explores lessons for how risk controversies are managed, particularly in response to public issues which focus on scientific uncertainty.

A contemporary view of risk

¹ Uniroyal is now part of Chemtura Corporation of Middlebury, CT.

The events of this seminal case must be considered in the context of risk and issue perception as it existed in the late 1980s. At that time issue management was just beginning to gain its full momentum; crisis management as a formal organizational discipline had recently been accelerated in the United States by the Tylenol crisis of 1982 and in Europe by the Chernobyl disaster of 1984; and the new concept of environmental risk communication was in its infancy.

In parallel there was an increasing public awareness and concern about industrial safety following high-profile incidents such as Three Mile Island (1979), Bhopal (1984) and Piper Alpha (1988), as well as growing community anxiety about food safety. In fact it has been claimed that the expression 'food scare' first appeared in print in relation to the 1982 Tylenol product tampering case (Campbell & Fitzgerald, 2001).

In the years immediately prior to the Alar controversy, some high profile food safety cases had put the subject very firmly on the public and activist agenda. For example, the United Kingdom saw the emergence of mad cow disease (BSE) in beef and the salmonella in eggs crisis in 1988, while the United States experienced the coffee and pancreatic cancer scare of 1981; pesticide in water melons panic in 1985; reported glass shards in Gerber baby food in 1986; and the tragic Jalisco cheese crisis of 1985, when up to 84 people in Southern California died after eating cheese made with improperly pasteurised milk.

More specifically pertinent to the Alar controversy was the EDB scare of 1983, when ethylene dibromide, long used as fumigant in stored grain, was detected in American supermarket products. EDB was suspected of cancer and other health concerns and was banned in 1984 amid public outcry that the government was dragging its feet. Significantly for the subsequent Alar affair, later examination suggested that the EDB risk was greatly overstated and that regulators over-reacted to a media-generated panic (Johnson, 1988; Klaidman, 1991).

The origins of the Alar controversy

It is against this background that allegations relating to Alar were presented to an increasingly risk-aware public. The principle events of the case are in little dispute, and have been chronicled in a number of detailed studies (for example Center & Jackson,

1995; Hermann, Warland & Sterngold, 1997; Lacey & Llewellyn, 1995; Rodgers, 1996; Rosen, 1990; Rosenberg, 1996).

Briefly, Alar was introduced in 1968 as a growth regulator for application to a variety of food and non-food crops, though apples accounted for the greatest use. As early as 1973 possible cancer concerns were raised about Alar, or more specifically about UDMH, a breakdown product generated by heat during processing such as for apple juice and apple sauce.

After a further study some EPA officials proposed cancelling food uses of Alar, but in 1986 this recommendation was overturned by the EPA's Scientific Advisory Panel, which had doubts about the validity of the research. However use of Alar was already in steep decline after most major food processors decided they would no longer accept Alar-treated apples.

In response to increasing concern the EPA announced on 1 February 1989 it would accelerate the review process with a view to eventual cancellation of food uses of the product, expected to take about 18 months.

But events a few weeks later triggered a dramatic change. NRDC had long been vocal about what they saw as over-bureaucratic review processes, and as part of their campaign produced a highly critical report entitled *Intolerable risk: Pesticides in our children's food* (Sewell & Whyatt, 1989). The report used food consumption data and worst-case scenario toxicity to claim, among other conclusions, that children were at greatly increased risk of cancer from consuming Alar-treated apples.

It was launched on CBS *60 Minutes* on 26 February 1989, where an estimated 40 million American viewers saw presenter Ed Bradley appearing in front of a graphic showing a skull and cross bones superimposed over an apple. He referred to 'the silent killer at the dinner table,' described Alar as the most powerful carcinogen in the food supply, and emphasized the NRDC claim that children exposed to pesticides faced much higher risks than adults (Lacey & Llewellyn, 1995).

The 13-minute television segment "elevated the Alar controversy from the level of a regulatory dispute to that of national pandemonium" (Rodgers, 1999, p. 180). In the ensuing panic, apples were taken off supermarket shelves and banned from some school cafeterias. And the resulting news media firestorm was further heightened with the

appearance on talk-shows and before Congress by actress Meryl Streep as spokesperson for the newly-created organization Mothers and Others Opposed to Pesticide Limits.

After more than two weeks, the Food and Drug Administration, the Environmental Protection Agency and the Department of Agriculture jointly announced that Alar “does not pose a health risk to the American public” and that “there is no imminent health hazard posed to children in the consumption of apples at this time, despite claims to the contrary” (FDA, 1989). Meanwhile the British government and a United Nations panel from FAO and WHO concluded that the toxicity data regarding Alar did not represent a particular health concern (Marshall, 1991).

In the United States the media blitz continued, and apple growers reported losses of \$100 million. Product rotted in packing houses and some apple growers were reportedly driven out of business. With the EPA under enormous pressure and legislation introduced into Congress to ban food uses of Alar, Uniroyal ‘voluntarily withdrew’ the product from sale in June 1989 and in October relinquished its food crop registrations.

The view of many commentators assessing the controversy is exemplified by Wall Street Journal writer Cynthia Crossen (1994) who concluded: “Alar was not banned because of a cool and informed appraisal of the best scientific evidence, but because of the coinciding interests of an advocacy group, a celebrity, a public relations company and the media” (p. 54).

Stakeholder Review

The strategies implemented in relation to this complex issue are best considered by a briefly considering each of the key participants: namely Fenton Communications, NRDC and the activist community, the news media and, most importantly, the two main business participants - the apple growers and the manufacturer, Uniroyal.

Fenton Communications

Fenton Communications and its founder David Fenton were hired by NRDC for a fee reported to be just \$26,000 over five months to publicise the report (Randolph, 1989) and generated an extraordinary volume of media attention. For example, Friedman, Villamil, Suriano and Egolf (1996) found 297 stories in 13 representative newspapers for the year, and stories about Alar and food safety made the covers of both *Newsweek* and *Time* (See also Smith, 1998).

In addition, the publicity generated sales of about 110,000 copies of a \$7.95 NRDC booklet *For our kids' sake: How to protect your child against pesticides in food* (Weiskopf, 1990, cited in Rodgers, 1996). In a memo written at the time for interested parties, but leaked to the Wall Street Journal, Fenton wrote:

The idea was for the 'story' to achieve a life of its own, and continue for weeks and months to affect policy and consumer habits. Of course, this had to be achieved with extremely limited resources. In most regards, this goal was met. A modest investment by NRDC re-paid itself many-fold in tremendous media exposure (and substantial, immediate revenue for future pesticide work). In this sense, we submit this campaign as a model for other non-profit organizations (Fenton, 1989. See also Steiner, 1989)

NRDC and the activist community

Although Fenton promoted his Alar campaign as a seminal success, this is not a view universally shared by the activist community, then or later.

NRDC officials subsequently produced a number of articles describing and defending the campaign (including Fulwood, 1996; Hathaway, 1993), but elsewhere were less enthusiastic. The original NRDC report examined 23 chemicals used on 27 different fruits and vegetables, and was intended to bring about change in the way chemicals in the food supply are regulated. However the orchestrated media attention focused almost exclusively on just one chemical (Alar) and on one crop (apples).

As the activist newsletter *Rachel's News* commented, the broader message of the NRDC report concerning the exposure of children to dangerous levels of pesticides "disappeared from view in the flurry over Alar" (Montague 1997).

Referring to Fenton's selective news media strategy, NRDC's executive director John Adams told a Washington Post reporter a few days later: "We wanted to get a maximum amount of coverage. What we did instead was we blew it. We got everybody angry at us. I'll never let myself get into this situation again" (Randolph, 1989).

A few years later NRDC spokesperson Janet Hathaway admitted that eliminating Alar had a 'palliative effect' and that the return from the tremendous effort surrounding it was disappointing. "She and many others had hoped that people would view the problems

of pesticides in food more seriously, and that there would be a revolution of sorts. Instead Alar was banned, and life (except for apple growers and workers) returned to normal” (Rosenberg, 1996, p. 47).

This view appears to be reflected within the current NRDC organization. At the time of the controversy, they reportedly called the withdrawal of Alar a “great victory” (Gold, 1989). However the 1989 Alar campaign is conspicuously absent from the chronology of NRDC ‘key victories from 1971 to 2006’ posted on the organization’s website today (www.nrdc.org).

News Media

The Alar incident prompted unprecedented examination of the resulting news media coverage and the role of the media in amplifying the controversy (Bodensteiner, 1995; Friedman et al. 1996; Lacey & Llewellyn, 1995; McKenzie, 1991; Smith, 1998). In particular, researchers and commentators questioned whether the media had been willing or unwitting participants in manipulation regarding Alar, and whether individual journalists crossed from reporting to advocacy.

Auld (1990), for example, believed the media were “instrumental in executing the Alar scare” (p. 540) and Smith (1998) suggested the public alarm aroused by stories about Alar had become a “classic example of irresponsible journalism” (p. 31). In a similar vein, Kunreuther and Slovic (2001) described it as “one of the most dramatic examples of media-amplified stigmatization of a product” (p. 337), while Friedman et al (1996) went even further, arguing that the Alar media coverage had become a landmark for people concerned about how the mass media cover environmental risk issues. “In fact,” they suggested, “media coverage of Alar has become as controversial as the Alar issue itself. Just as scientists cannot agree whether Alar caused increased rates of cancer, journalists and others cannot reach consensus about how Alar was and should have been covered” (p. 1).

Bodensteiner’s more measured conclusion (1995) was that since Alar, the news media appeared to be “somewhat more sceptical and cautious in their approach to coverage of food safety issues” (p. 17). Although there was increased research into the role of the news media in risk communication and public perception of health risk (see

for example Harrabin, Coote and Allen, 2003; Klaidman, 1991; Macintyre, Reilly, Miller and Eldridge, 1998) it is now doubtful if heightened media caution was sustained.

Apple Growers

Although Alar was used on a number of food crops, it was the apple growers who found themselves at the centre of a media and political storm. From their public responses and statements it is evident they made a strategic decision to strenuously defend Alar. This apparent strategy had three principle elements

Firstly, various apple grower organizations entered into the debate with strongly worded statements and media appearances; attacking the credibility of the NRDC and other activists; defending the product as a wholesome element of daily diet; and highlighting the devastating effect on agricultural communities and an important industry in the United States. They also very actively sought out and promoted independent experts who would support their various argument.

Secondly, the apple growers funded a substantial public campaign to defend the safety of apples and to refute the claims made by NRDC and others. Within days of the *60 Minutes* broadcast, the Washington State Apple Commission voted unanimously to commit \$1.7 million to counter negative sentiments from the NRDC report (Dunlap & Beus, 1992).

However, the apple growers' argument was weakened by the very resilience of their own industry. The percentage of apple sales lost was strongly contended, but may have been about 30 per cent, and at the end of summer the U.S. Government stepped in to purchase about 1.3 million boxes of unsold apples. Yet the industry bounced back very quickly and the immediate effects of the controversy had virtually dissipated by the beginning of the next harvesting season. Indeed, the President of the International Apple Institute conceded in late 1990 that the industry overall suffered little fallout, and that "the loss of Alar was not a major catastrophe for growers" (Negin, 1996, p. 14).

Despite this recovery, the Washington apple growers determined to pursue a third response strategy, namely an aggressive legal campaign against their detractors. In November 1990 they filed suit against CBS, charging that the risks of Alar residues in food had been knowingly exaggerated. The case was dismissed on 13 September 1993 in the Spokane Federal District Court. Judge William Fremming Nielson concluded that

even if CBS's statements were false, they were about an issue that mattered, could not be proven as false, and therefore must be protected by the First Amendment. To pursue the case, he said, would so chill debate that the freedom of speech would be at risk.²

Although by this late stage the Alar controversy was long concluded, the apple growers persisted with their legal strategy. After losing a Federal Circuit Appeal in 1995, the apple growers took their argument right up to the U.S. Supreme Court. But on 29 April 1996 the court unanimously declined to review the case, effectively ending the litigation (For an NRDC view of the legal outcome see Fulwood, 1996).

Uniroyal

Of all the parties affected by the Alar controversy, the issue management strategy pursued by the manufacturer, Uniroyal, is the least researched and the most enigmatic. Based on published information, the company made an early decision not to take a high profile throughout the controversy. According to CBS, Uniroyal turned down an invitation to respond on the original *60 Minutes* broadcast and also declined to participate in a *60 Minutes* follow-up panel discussion.³

Uniroyal Director of Research and Development, John Lacadie, later told a researcher: "We thought Alar was a technical problem and that if we got the technical information out, it would solve the problem. Clearly, it did not" (Menzie, 1991, p. 15). He added that he personally called several newspapers to give them the technical opinion, but the newspapers showed little interest in his information.

This is certainly borne out by the remarkable dearth of published statements on the controversy which are directly attributable to the manufacturer. Uniroyal instead worked through third parties, such as Berkeley biochemist Bruce Ames, John Rice of the International Apple Institute and the highly proactive American Council on Science and Health (ACSH), of which Uniroyal was a corporate sponsor. As a result there was surprisingly little media attention to Uniroyal itself, which managed to effectively separate itself from its controversial brand. Overall, Uniroyal appeared to suffer little apparent economic or reputational damage.

Issue Management Responses

² *Auvil v. CBS 60 Minutes*, 1993

³ Chemtura, the successor to Uniroyal, was approached for comment as part of this 20 year review of the controversy, but declined to respond.

While many other parties were intimately involved in the controversy, including the EPA and the scientific community, the two key organizations which responded in terms of reputation issue management were the apple growers and Uniroyal, which pursued very different strategies.

The apple growers found themselves facing a classic issue management dilemma – trying to defend a product about which the science is uncertain and, more importantly in this case, where the national regulator had already publicly declared it a serious health concern warranting further restriction and immediate review (Moore, 1989).

Moreover, the apple growers faced a reputational issue beyond just an aggressive opponent emphasizing the scientific uncertainty – namely a symbolism which was virtually impossible to overcome. As the risk communicator Peter Sandman observed:

If it had been bananas, there would have been a lot less public outrage and media attention. Apples are a symbol of innocence and innocence betrayed. There's the Adam and Eve story, and Snow White. It was a wonderful symbol for cartoonists and it captures something in our culture (cited in Haddix, 1990, p. 44).

And not only were apples themselves such a powerful symbol, but NRDC scientist Lawrie Mott agreed they zeroed in on Alar in part because it was a 'cosmetic product' and not essential. "That makes virtually any risk associated with the chemical unacceptable" (cited in Marshall, 1991, p. 21).

Although the original NRDC report was not just about apples and not just about Alar, Fenton Communications' strategy unambiguously defined the issue and the apple industry's very active media response kept the focus on apples and reinforced their opponents' characterization of the controversy.

For example, O'Rourke (1990) has argued that by criticising bias in the first *60 Minutes* story, the apple industry effectively prompted the follow-up broadcast on 14 May, which allowed the industry and its allies to respond. However it also provided critics a fresh opportunity to highlight alleged health hazards of Alar on apples "and the net effect was that apples and apple products remained in an unfavourable spotlight for almost three months" (O'Rourke, 1990, p. 419).

Despite the very real short-term financial impact, it should have been recognised that recovery would be quick once Alar was withdrawn, which proved to be the case. Perhaps the apple growers should not have allowed themselves to become the centre of the story defending someone else's product. Instead they could have focused more on reinforcing the benefits of their own product, with messaging that 'apples are safe and good for you.' By persisting with an attack on the credibility of NRDC, and by getting deeply entangled in the argument about whether or not Alar (or UDMH) does in fact cause cancer, the apple growers helped prolong the negative sentiments associated with apples and reinforced by repetition the link between their produce and cancer.

In addition, it should have been clear from very early in the controversy that the eventual complete withdrawal of Alar was simply a matter of time. Because of previous cancer concerns, the use of Alar was already in steep decline. A few weeks **before** the *60 Minutes* broadcast, Uniroyal spokesperson Yanis Bibelnieks said the company's sales of Alar had dropped by about 75 per cent since 1986 and it was used on only about five per cent of American apples (cited in Shabecoff, 1989).

While hindsight is a powerful perspective, it can be argued that apple growers should have voluntarily ceased use of the product long before the *60 Minutes* exposé in February 1989. Not only were apple sales and Alar use already declining, but events were to confirm that the eventual withdrawal of the product had no long-term effect on the size of the national harvest, and consumer acceptance of apples recovered very quickly.

It has been claimed (O'Rourke, 1990) that the apple growers mistakenly believed if a product was legal to use, and had been used in the past without penalty, it could be used without economic risk. Furthermore, O'Rourke suggested they over-relied on the position of Uniroyal, the manufacturer, that Alar would eventually be vindicated.

Although some of the apple industry's strategic decisions were made in the heat of media glare and grower anger, the same cannot be said for the industry's legal strategy, which was not launched until late 1990, by which time the worst of the controversy had already passed. Not only did this prolong the affair for more than six years, but the litigation was not fundamentally about the health threat of Alar on apples, despite NRDC claiming that rejection of the case "unequivocally affirms that the NRDC study warning of Alar's dangers was grounded in sound science" (Fulwood, 1996, p. 9). The courts in

fact did not rule on the truth of the allegations but found that the growers had failed to provide evidence to disprove the NRDC claims. The legal judgement addressed only the question of whether or not CBS knowingly broadcast false information.

Defenders of the apple growers' litigation strategy have argued that in the wake of the controversy, and in response to lobbying from apple growers and other agricultural producers, several American states introduced "anti-disparagement laws" designed to protect agricultural commodities from unwarranted criticism. It is claimed these events reduced the likelihood of future allegations against food products, but in retrospect it is difficult to see that the legal strategy in relation to Alar had any practical benefit for apple growers.

O'Rourke (1990) concluded that producers of agricultural products are very vulnerable to economic loss in any attack on the chemicals they use, and that while it is relatively costless to raise the issue of hazards, the cost of a defence may be exorbitant, whether or not the hazard turns out to be real. "A spirited defence, as in the apple industry Alar case, may only prolong the period during which the product received unfavourable public attention" (p. 422).

By contrast with the apple growers, who played a very active and highly visible role during and after the Alar affair, the manufacturer Uniroyal seemingly took a totally different approach to the reputation risk presented by the attack on its product.

Their apparent strategy, inferred from public information, was to minimise engagement with the news media; encourage users and third parties to defend the product; separate the company name from the trade name under attack; avoid the company name being linked to cancer allegations; and to preserve the chemical daminozide for ongoing non-food use.

While attacks on particular chemicals were nothing new, the situation facing Uniroyal at the time of the NRDC report was quite unusual. Alar represented less than one per cent of the Uniroyal's sales, and the already declining product was facing an imminent ban. Rosenberg (1996) has suggested that the company's decision to keep the product on the market as long as it did was more ideological than financial. But hindsight suggests the company chose to exit the market in the most orderly fashion, with the least reputation damage to itself and its product.

One of Uniroyal' few publicly accessible position statements was contained in a letter to customers at the time of the voluntary withdrawal in June 1989. Marketing Manager Christopher S. Exton wrote:

As you are aware, the examination by the USEPA of the risks and benefits of daminozide has been under intense scrutiny from the news media since early this spring. Although we consider this controversy unfounded, we are very concerned that it has caused terrible losses for you, our customers, who purchase and use these products. In order to protect our customers and put aside the public controversy concerning the safety of foods you produce, Uniroyal has decided voluntarily to stop sales of all daminozide products registered for food uses and to recall all existing stocks and inventories.

Uniroyal strongly believes that daminozide is a safe and useful product. We have taken these extraordinary measures to stop sales and recall these products while the scientific controversy regarding this product is being resolved in order to protect you, our customer, and allay the public's concerns (reproduced in EPA, 1989).

At the time of the controversy, the company said the withdrawal of food registration for Alar had "no employment effect, neither plant closings or layoffs" (cited in Rosenberg, 1996, p. 40). Even the material recalled was relabelled with the alternative tradename "B-Nine" for non-food use, particularly in commercial flower growing. Indeed, Rosenberg (1996) reported that seven years after the controversy there was no evidence that daminozide production had decreased. The product B-Nine remains one of the most widely used growth regulators in floriculture.

What was learned

As a case study of issue management in the face of scientific uncertainty, what lessons were learned from the contemporary participants?

When business or reputation is at risk it is sometimes tempting to default to just 'say nothing' rather than following an agreed plan to minimise public comment for legitimate strategic reasons. For Uniroyal some particular circumstances favoured the latter course, including the availability of willing and credible third parties; the relative

unimportance of the product to total business; the rare situation where it was possible to separate the trade name from the manufacturer; and perhaps most importantly, the reality that Alar's withdrawal from food use was virtually inevitable.

However, although events proved the success of the minimum engagement strategy in this case, the same confluence of circumstances seems much less probable 20 years later because of developments among three key stakeholders, the regulators, the public and the news media.

In the wake of the Alar affair, EPA regulator John Moore said the case brought home that scientific data is susceptible to manipulation and may be used selectively and inappropriately to make calculations that misrepresent pesticide risks. He added:

The Alar apple panic suggests a strategic failure on the part of EPA and underscores the need for more comprehensive, more proactive public education and risk communication initiatives in pesticide issues than EPA has carried out in the past. . . . Clearly consumers need a basic frame of reference for understanding pesticide issues if they are to become less vulnerable to alarmist publicity in the future (Moore, 1989, p.9).

Dr Moore's view that a regulatory agency has a role to promote broad-scale consumer education has been widely taken up around the world, although the effectiveness of that change remains in question.

With regard to changing public expectation, it is no coincidence that soon after the Alar controversy, Beck coined the concept of a 'risk society,' where citizen groups play an increasingly important role in defining risk. It can also be argued that increased consumer education through new technology such as the Internet has in fact helped increase rather than decrease risk uncertainty (see for example Coombs, 2002).

At the same time the evolution of 24/7 news coverage has made it much more difficult for organizations to pursue the minimal media engagement strategy, even when the circumstances make that an appropriate option. The Alar controversy raised many issues at the time about journalists as advocates and news media over-reliance on funded 'experts.' But here again there seems to have been little lasting change.

In terms of issue and reputation management in the face of risk uncertainty, perhaps the most striking immediate lesson from the Alar controversy is the power of symbols in the battle for credibility, in this case children and apples. In the face of such powerful symbolism, Lacey and Llewellyn (1995) concluded that for all their scientific and epidemiological facts and data, industry and government agencies lost control of defining terms early in the life of the controversy and as a result were never able to mount a successful response.

Implications for modern practice

Positions purportedly based on science are often used to help fight issues which are about essentially moral or ethical concerns, such as the abortion debate, the killing of baby seals or creationism versus evolution. But in the Alar controversy the central issue, at least superficially, was a legitimate scientific question – namely, did Alar in food applications pose an unacceptable risk to human health.

Although NRDC itself argued that the issue was intended to be about the responsiveness of regulators in protecting public health rather than the toxicity of any particular chemical, there is no doubt that the scientific merit of the NRDC report on pesticides was central to their argument.

What then are the implications for a modern industry or organization responding to an issue which revolves around science-based allegations where the facts are uncertain, or are claimed to be uncertain? Apart from the general lessons previously discussed, the broader implications for modern practice can be considered in respect to the role of the courts; the role of experts; and the role of technical information.

The role of the courts

Issue management may often involve legal proceedings, but legal proceedings alone will seldom ever “resolve” an issue. Courts are generally ineffective in settling disputes over scientific facts, and research suggests that court proceedings in issue management can easily become a lose-lose option.

It is axiomatic that an organization can win in the court of law and lose in the court of public opinion. In the Alar case, even if the apple growers had won their case against CBS, the question about the safe use of the product on apples would not have been advanced in any way. All they achieved was to prolong negative attention on a

controversy which had already been concluded. In the context of managing any high profile issue it is vital to have a legal perspective and input. But the Alar case highlights the danger of allowing legal considerations to predominate over broader issue strategy.

The role of experts

The use of experts and independent third parties is a well accepted method in issue management, and this approach becomes even more compelling when responding to technical or scientific issues. However the nature and credibility of the experts is critical. Government regulators are a common source of authoritative information, but in the Alar case the US agencies themselves were presented as part of the problem and were unable to quell public concern. They were also slow to respond. By contrast national and international regulators in Europe acted promptly and efficiently to 'rule' on the science, and the issue gained very little traction outside North America.

Credibility is also a major factor when considering the use of expert organizations, particularly in relation to how they are funded. Uniroyal chose to speak through the industry-funded American Council on Science and Health, whose feisty CEO Elizabeth Whelan was very active in the public defence of Alar. However the methods and motivation of her organization became a contentious part of the controversy about the role of the media (see for example Kurtz 1990) and detracted from the scientific debate. The challenge is to identify unimpeachable experts whose contribution will help rather than hinder resolution of the issue.

The Alar case was also an early example of the use of celebrities as 'experts'. Frank Mankiewicz of Hill and Knowlton, the apple growers' PR consultancy, later noted: "We got rolled. When you're dealing with a nutritionist named Meryl Streep, you haven't got a chance" (cited in Patterson, 2005, p. 110). The actress was obviously no nutritionist, but her influence was seriously underestimated. When it comes to managing major public issues, the case provides a sobering example of how celebrity trumps science.

The role of technical information

The most important implication from the Alar case relates to the role of technical information in resolving public issues, particularly those based on a scientific dispute. As previously described, a Uniroyal executive eventually conceded it was not just a technical

problem which could be dealt with by providing information. However technical information is still essential for an effective issue management strategy.

The key is to balance technical information with the need to respond to the non-technical and emotive aspects which often characterise high profile issues. This challenge was well captured by the Chairman of Shell speaking in the wake of their disastrous attempt in 1995 to sink the redundant oil storage buoy Brent Spar in the North Atlantic. Referring to the company's failure to recognise that the issue was symbolic as well as technical, Cor Herkstroter said "a type of technological arrogance" is common in companies with a strong technical base. "For most engineering problems there is a correct answer. For most social and political dilemmas there is a range of possible answers, almost all comprises. So starting off with a strong, scientifically grounded mindset, we tended to misjudge some of the softer issues and consequently made mistakes. We misread some of the situations" (Herkstroter 1996, p. 103).

The proper conclusion here is not that technical information is unimportant, but that it is a mistake to over-rely on it. Having the technical facts straight and communicating them well is an essential foundation, but it must be balanced with the appropriate recognition of all the other factors which make issue management a challenge.

In cases like the Alar controversy, the heat of contention can remain for decades. Even after 20 years, partisan observers still use Alar as shorthand to characterise their argument. While the 'true facts' of the Alar controversy may never be agreed, research is now needed into whether management in more recent cases have demonstrated a greater capacity to recognize the need for balance, and how future managers can achieve better outcomes when responding to issues where scientific facts are in dispute.

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