CASE PROGRAM



2005-22.3

## The 1998 Sydney Water Crisis (C- Epilogue)

At 8.45 am on 30 July 1998, New South Wales Minister for Urban Affairs and Planning Craig Knowles, the Operating Licence Minister for Sydney Water, called Premier Bob Carr. During their discussion about the worsening state of affairs, they agreed that an inquiry should be held. Announced by the Premier later that day, the scope of the inquiry was to include: the cause of the contamination; how the incident was managed; and the adequacy of public notification. In the meantime, Knowles assumed control of the situation. He instructed his staff to prepare a press release and arrange a media conference which was designed to explain the actions being undertaken and allay public concern.

By 4.30 pm, Knowles was convening a meeting between himself, the Premier, the Health Minister, NSW Health and Sydney Water. Managing Director Chris Pollett advised those present that the likely cause of contamination was the Upper Canal leading to the Prospect Plant, or backwashing conducted at the plant itself. On learning this, Director-General of NSW Health Michael Reid advocated an immediate extension of the warning. The Premier and Ministers agreed. The Premier then questioned Pollett about Sydney Water's proposed solution to the problem. Pollett reported that the Upper Canal had been shut off and water was bypassing the Prospect Plant. Water for Sydney was now being drawn and chlorinated directly from Warragamba. A public statement to that effect was drawn up and disseminated that evening. The release also made reference to both *Cryptosporidium* and *Giardia*. During the meeting, Pollett got word of high-positive results from Palm Beach (365C/151G). He conveyed this information to the others. <sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> McClellan, P. 'Sydney Water Inquiry, Second Interim Report: Management of the Events' NSW Premier's Department September 1998 pp. 63-64

This case was written by Marinella Padula for Dr Allan McConnell, University of Sydney. It follows the cases 2005-22.1 and 22.2 and was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of a managerial situation. The use of sequels, epilogues and teaching notes is restricted to authorised persons only

However, there was one problem: the Prospect Plant was still in operation. Knowles confirmed it the next morning after Chris Pollett spoke on radio, again suggesting that the plant had been shut off. In its explanation to the Minister, Sydney Water claimed that it had proved too difficult to bypass the plant completely and when early morning samples showed zero levels of *Cryptosporidium* and *Giardia*, they decided that closing the entire plant was unnecessary. They believed the measures they had taken to be sufficient. Pollett claimed he had alerted Knowles to the fact that the plant was still operation, but the Minister did not recall any such advice.<sup>2</sup> A "clarifying" release explaining why Prospect had not been totally shut down was issued by Sydney Water at 6.00pm.

As the intense media scrutiny continued, Premier Bob Carr made it clear that Sydney Water did not enjoy the government's support. At the same time he announced the inquiry, he also stated:

"If something like this with all its implications for the public, for customers, happened in the private sector, the managers would be removed without ceremony, now the same will happen here...We've been told by Sydney Water that water from the tap in Sydney is safe, now we know it's not, I want to know why and I want it fixed up. You ought to able to turn on the tap and get clean, safe water - the idea of having to buy bottled water to feel safe has been repugnant."<sup>3</sup>

Pollett publicly denied that the latest developments signalled a "major crisis". He said that the warnings had been issued as "a precaution" and that "the parasites should die off in a few days."<sup>4</sup> This did little to dampen the media's enthusiasm for headlines such as "Water panic sweeps Sydney".<sup>5</sup> Pollett and Sydney Water were the primary focus of editorial disdain:

"The inescapable conclusion from the timing of the announcements and from Mr Pollett's vagueness under questioning is that Sydney Water does not know how much contaminated water or how many million bugs have been ingested by the people of Sydney. Their testing is apparently so inadequate that contaminated water can flow from a single source to the entire city without it being noticed. Such culpable ignorance simply will not wash."<sup>6</sup>

Over the next few days, Knowles met with health experts and NSW Health officials to discuss when alerts could be lifted. Various parts of Sydney were gradually declared safe until 4 August when the entire city was given the all-clear. During this process, Sydney Water Chairman David Hill maintained a very low profile. Criticised for his public absence, he did not make a statement until the scare was over, at which point he announced an internal inquiry into the matter and a \$35 million upgrade of water storage controls. At the same press conference, he described the "witch-hunt environment" his organisation now found itself in and praised Sydney Water staff and management for restoring order so quickly, "I think people have been working their butts off," Hill said. "I think they deserve the opportunity to explain what they have done and I don't think we should be prejudging them."<sup>7</sup> Nonetheless, calls for management and the board to be

<sup>&</sup>lt;sup>2</sup> ibid p.65

<sup>&</sup>lt;sup>3</sup> 'Carr chases scalps over water bug.' The Australian 31/7/98

<sup>&</sup>lt;sup>4</sup> ibid

<sup>&</sup>lt;sup>5</sup> Webber, N. 'Water panic sweeps Sydney' Courier Mail 1/8/98

<sup>&</sup>lt;sup>6</sup> 'Trickle down effect' *Daily Telegraph* 3/8/98

<sup>&</sup>lt;sup>7</sup> Nason, D. 'Cross currents' *The Australian* 8/81998

sacked continued while talk of compensation for affected businesses and groups also dominated airwaves.

On 6 August, Peter McClellan QC, a former assistant commissioner of the NSW Independent Commission Against Corruption, was named as head of the inquiry into the water contamination scare. On making the announcement Premier Carr said, "I am not concerned with the bristling egos in Sydney Water or anywhere else...I am concerned about a public expectation that the water they (the public) get from their taps is drinkable and safe."<sup>8</sup> He reiterated that he was "not satisfied" with the performance of Sydney Water claimed that the inquiry would be "rigorous" in its examination of the corporation's executives. However, some media commentators speculated that the Carr government's narrow majority and an upcoming March election were fuelling the Premier's attack on a former political ally.<sup>9</sup>

Two weeks later, McClellan released an interim report concentrating on the cause of the outbreak. It coincided with the announcement that Chris Pollett's position had been "terminated" at a Sydney Water board meeting that same day.<sup>10</sup> Entitled 'Possible causes of contamination' the first report was inconclusive but noted that some scenarios were more likely than others. In it McClellan wrote:

"I consider it unlikely that there was a localised contamination event and I doubt that the Potts Hill reservoir was the source of pollution. The water supply throughout Sydney was contaminated and I am satisfied that the organisms had entered the system by the time water passed into the distribution chamber about 800m downstream of the Prospect Plant. The source of the contamination may have been the scouring of a channel taking raw water into the Prospect Plant or some unusual event in the catchment. At present there is no evidence of such an unusual event."

He was also not entirely convinced that the Prospect Plant was the source either but was reserving judgment until investigations were complete. One theory being tested was that routine maintenance at the plant had caused an influx of contaminants into the system. Another was that recent heavy rainfalls had allowed untreated groundwater to infiltrate the system. But irrespective of the cause, it appeared that the water supply was continuing to be polluted sporadically. In reference to health outcomes, the report did not find any discernable increase in disease. Although *Cryptosporidium* and *Giardia* had been found in the water supply, most of the organisms were believed to be dead or decaying. However, the inquiry was still waiting on test results which would reveal whether *C. parvum* was amongst the *Cryptosporidium* species found as it was the only one which posed a threat to human health. A day after the report was released, David Hill quit his post as chairman. He was replaced by Gabrielle Kibble.

Monitoring of the Sydney Water supply continued until 24 August when another outbreak was detected and city-wide boil-water alert was issued. "*Cryptosporidium* levels are comparable if not higher than last time, but most of the giardia levels are lower," NSW Chief Health Officer Dr Andrew Wilson was quoted as saying.<sup>11</sup> International experts had

<sup>&</sup>lt;sup>8</sup> Nason, D. 'Carr taps into egos at water authority' *The Australian* 6/8/98

<sup>&</sup>lt;sup>9</sup> Nason, D. 'Cross currents' The Australian 8/8/98

<sup>&</sup>lt;sup>10</sup> Nason, D. 'Sydney water war claims first scalp' The Australian 20/898

<sup>&</sup>lt;sup>11</sup> Walsh, P. 'It's back / At 10.30 last night Sydney was told to boil its water again.' Daily Telegraph 26/8/98

been recruited to advise the government but the situation was becoming anything but clearer. A visiting US academic was reported as saying that the elevated results could be due to harmless algal blooms which would explain the high readings but apparent absence of disease. Sydney Water however, stood by its test results. The alert was fully lifted on 4 September only to be reinstated for the entire metropolitan area the next day.

Relief for NSW Health and Sydney residents finally came on 19 September when the alert was lifted for the last time. Earlier that month, McClellan released the second report into the incident, this time concentrating on the management of the initial event. While the report identified "failings" with regard to NSW Health's crisis management procedures, McClellan found that NSW Health acted appropriately in unilaterally releasing the Prospect wide alert on 29 July. While the report acknowledged that it was difficult to determine exactly what happened, it did not reflect very favourably on Sydney Water. The organisation was criticised for "killing" the NSW Health release, limiting the scope of the new one and removing references to *Cryptosporidium*. McClellan blamed the contradictory releases on "the lack of effective decision-making within Sydney Water" and added that "Sydney Water failed to accurately and adequately advise The Hon Craig Knowles".<sup>12</sup> Although the Inquiry's Terms of Reference prevented McClellan from making findings with regard to individuals, the actions of Chris Pollett and David Hill in particular were brought into question.

The third report released in October put Sydney's water infrastructure under scrutiny. McClellan's conclusions did not provide the government with much comfort:

"My investigations have shown that the main catchment for Sydney's water supply is seriously compromised, not only by the presence of *Cryptosporidium* and *Giardia* but in other significant respects. These problems have been identified in previous investigations and are the result of neglect over many decades. The health of the catchment is a fundamental responsibility of our community, both for this, and subsequent generations."<sup>13</sup>

The report also revealed that, "The extensive research which has now been undertaken creates doubt about many of the laboratory results obtained during these events. *Cryptosporidium* and *Giardia* may not have been present in the drinking water in the high numbers originally reported. However, it is clear that having regard to the information available at the time a conservative public health response was appropriate."<sup>14</sup> Although the science of detection and determining health impacts was still imprecise, there were still significant flaws in Australian Water Technologies' [AWT's] "laboratory operations and record keeping. Quality control failures were found prior to the contamination events but the number of these failures increased significantly as the number of samples being tested increased."<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> McClellan, P. *Sydney Water Inquiry, Second Interim Report: Management of the Events* NSW Premier's Department September 1998 pp.7-8

<sup>&</sup>lt;sup>13</sup> McClellan, P. Sydney Water Inquiry, Third Report: Assessment of the contamination events and future directions for the management of the catchment NSW Premier's Department October 1998 p.4

<sup>&</sup>lt;sup>14</sup> McClellan, P. Sydney Water Inquiry, Third Report: Assessment of the contamination events and future directions for the management of the catchment NSW Premier's Department October 1998 p.4 <sup>15</sup> ibid p.5

McClellan's fourth report looked into the process of evaluating tenders and awarding the contract for the construction of Prospect Water Filtration Plant as well as the adequacy of current arrangements for water treatment. It did not reveal any significant impropriety but McClellan noted that, "The process of selection was concerned more with obtaining the lowest price rather than ensuring the highest quality technology."<sup>16</sup> The fifth and final report was also released in December that year. It summarised the findings of all previous reports and contained a series of recommendations. While it did not offer a definitive account of the first or subsequent incidents, it explained the contamination thus:

It is now apparent that the catchment waters for much of Sydney's water supply contain significant sources of *Cryptosporidium* and *Giardia*. Heavy rains in the catchment which followed a period of significant drought carried the organisms into the stored waters of Warragamba and other dams. Although the rainfall at the time of the First Event was not as significant as the later events, the treatment plant at this time experienced a number of operational difficulties which would have allowed pathogens to pass in greater than usual numbers. There is also a possibility that some pathogens were concentrated in parts of the treatment plant and released during the events, although I doubt whether any of these possibilities provides a complete explanation. The Second and Third Events were caused by pathogens which were washed into the catchment waters and passed through the plant when it was required to treat highly turbid waters...The absolute numbers which passed cannot be determined and as a consequence it is not possible to assess the performance of the plant during the events.<sup>17</sup>

Due to the difficulties surrounding the detection and analysis of *Cryptosporidium* and *Giardia*, McClellan found it impossible to conclude exactly to what extent Sydney's water supply had been compromised. What was clear was that it was highly unlikely that anyone experienced illness a result of the incidents. However, more problematic was the fact that AWT was a wholly owned subsidiary of Sydney Water. McClellan suggested that independent sampling and testing of the water supply was necessary to maintain public confidence. As for Sydney Water and NSW Health, McClellan recommended, amongst other things, that:

1. A comprehensive Incident Management Plan must be developed.

2. Sydney Water and NSW Health must refine the relevant procedures and undertake staff training to prepare for the future management of contamination incidents.

3. NSW Health must have clear authority to make public health alerts in relation to drinking water incidents.

4. NSW Health must develop the expertise necessary to make public health decisions about the impact of a potential contaminant in the water supply system.

5. The MoU between NSW Health and Sydney Water should be reviewed, particularly in relation to operational and communication difficulties experienced during the contamination event.

<sup>&</sup>lt;sup>16</sup> McClellan, P. Sydney Water Inquiry: Fourth Report: Prospect Water Filtration Plant tender process and contract arrangements Ch 1, p.1 NSW Premier's Department December 1998

<sup>&</sup>lt;sup>17</sup> McClellan, P. Sydney Water Inquiry, Fifth Report : Final Report Volume 2 NSW Premier's Department December 1998 p.2

6. The MoU should be supported by an Interim Health Protocol which identifies appropriate triggers to institute action in response to positive findings of Cryptosporidium and Giardia, and the circumstances leading to boil water alerts and their subsequent lifting.

7. There should be one spokes person with appropriate authority to make statements on public health a lerts.  $^{\rm 18}$ 

By the release of the report, both organisations had taken steps towards implementing the recommendations. It represented the end of a protracted, exhausting period for NSW Health, Sydney Water and the Government. In her 1999 Chairman's Report, Gabrielle Kibble outlined some of the changes Sydney Water had made including the appointment of a new general manager and the establishment of an Audit and Risk Management committee. She also wrote:

The new Board and corporate Executive have learned important lessons in the past 12 months. We are to be more consultative and we are absolutely committed to delivering good, clean water and waste water services. Of course, the crisis reinforced in the minds of all of us that the trust and respect of the community must be earned through demonstrations of top performance on a daily basis. We are committed to an over-riding principle – quite simply, we will not take risks with public health.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> McClellan, P. *Sydney Water Inquiry*, *Fifth Report*: *Final Report Volume* 2 NSW Premier's Department December 1998 Ch 2, pp.1-2

<sup>&</sup>lt;sup>19</sup> Sydney Water Annual Report 1999 p. 5