Multiple Chemical Sensitivity in the Australian Workplace

Policy Directions for SafeWork SA

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Executive Summary

Multiple Chemical Sensitivity is a debilitating condition that has a significant impact not only on those who suffer from it but also on the greater community. Symptoms are triggered by exposure to a wide variety of chemicals, which can potentially render any workplace very dangerous. The condition can develop at any time with no warning after exposure to low levels of ‘safe’ chemicals. The symptoms of MCS vary in severity and can be extremely restrictive, with a very significant life impact.

MCS is not currently recognised as a disease in Australia, but is considered to be a legitimate disability. The ongoing debate over the validity of MCS, centred on its unknown causal mechanism, has made policy development difficult. It is apparent that MCS presents a serious threat to a person’s capacity to work and participate in society. Although SafeWork SA cannot improve the medical condition of patients, it has the power to make their work life easier and more effective through a series of simple policies designed to make the workplace more MCS-friendly. These policies would not only benefit the relatively small proportion of workers affected by MCS, but also those suffering from other conditions such as Chronic Fatigue Syndrome. Reducing the amount of chemical exposure, even in ‘safe’ doses, would benefit all workers, and may help to prevent others from developing the condition.

Effective MCS policy requires inter-agency cooperation. SafeWork SA’s role would be centred on hazard reduction and risk management; attempting to prevent workers from contracting MCS, and assisting them in retaining employment if they do.

No action can be taken on MCS that does not benefit the entire workforce. The economic cost of acting will in most cases be smaller than the cost of losing workers who are unable to manage their condition in public spaces, and although accommodating MCS may initially cause some inconvenience, the long-term benefits will be of great value to South Australia.

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1.1 Project Scope

- To establish an appropriate policy direction for SafeWork SA regarding the accommodation of Multiple Chemical Sensitivity across Australian workplaces.

- Said policy should consider the following:

    - Whether overlaps with other conditions, specifically co-morbid conditions such as Chronic Fatigue Syndrome, Post Traumatic Stress Disorder, and Fibromyalgia, warrant an overarching policy rather than an individualised approach

    - Whether MCS is manifested in existing WorkCoverSA claims data, and if not;

    - The validity of MCS in worker's compensation cases

    - Appropriate conduct for employers regarding both the management and prevention of MCS cases

    - Appropriate conduct for employees, both those suffering from MCS and those sharing a workplace with MCS patients

1.2 Terms

PATIENTS and SUFFERERS are used to describe people experiencing the symptoms of multiple chemical sensitivity, both diagnosed and undiagnosed.

MCS describes a case that meets all of the diagnostic criteria established in section 2.0.

2.0 Introduction – Multiple Chemical Sensitivity

Multiple Chemical Sensitivity (MCS) is a serious and in many cases debilitating condition. It has been claimed that severe cases of MCS have a similar disabling life impact to multiple sclerosis (MS) and epilepsy.[1] It is an illness "presenting as a complex array of symptoms"[2] that have been attributed to both acute and prolonged exposure to chemical compounds, and in most cases reactions occur in response to multiple, chemically unrelated compounds.[3] Although definitions of the illness vary, it is commonly agreed that MCS is the result of chemical exposure in which both the compound and the level of exposure are considered harmless to the majority of people.[4] The important distinction between MCS and chemical poisoning is that MCS is an unforeseen and overall uncommon reaction manifesting in an extreme minority of exposure cases.

Although there is as yet no formal medical consensus on the status of MCS as a disease, clinicians and researchers who readily acknowledge its severity have reached a consensus regarding diagnosis. In 1999, Bartha et al synthesised existing diagnostic theories and developed a six point criteria for diagnosing MCS which is widely accepted by MCS researchers. The diagnostic criteria are that:

1. The condition is chronic, recurring over a protracted period of time.
2. Symptoms are reproducible with repeated chemical exposure.
3. Low levels of exposure, lower than previously or commonly tolerated, result in manifestations of the syndrome.
4. Symptoms occur in response to multiple chemically unrelated substances.
5. Symptoms involve multiple organ systems.

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[1] Mark Donohoe in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, Adelaide, 2005, p.73.
[2] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health, *A Scientific Review of Multiple Chemical Sensitivity: Identifying Key Research Needs*, Canberra, 2010, p.1
[3] "What is Multiple Chemical Sensitivity?" multiplechemicalsensitivity.org, accessed September 8, 2011, http://www.multiplechemicalsensitivity.org/multiple-chemical-sensitivity-2.php
[4] Taylor Spencer and Paul Schur, 'The Challenge of Multiple Chemical Sensitivity', *Journal of Environmental Health*, vol.70 no.10, (2008), p.24.

6. The symptoms improve or resolve when the incitants are removed.[5]

To be considered multiple chemical sensitivity all of the above criteria must be met. Those who report chemical sensitivity may meet most of the above criteria, but generally fail points 4 and 5. Hence, while chemical sensitivity is quite common, *multiple* chemical sensitivity has a lesser prevalence.

2.1 Common Triggers and Symptoms

There have been many different triggers claimed by MCS patients and researchers, but the most commonly claimed triggers are pesticides, cigarette smoke, paint fumes, wood preservatives, mercury, office photocopier fumes, perfumes and other fragrances, formaldehyde, isocyanate, and epoxy.[6] Further triggers include solvents, petrochemicals, carpet, glues, rubber, industrial emissions, plastics, new furnishings, medications, hair products, anaesthetics, cleaning products, and food additives.[7] With such a wide variety of potential triggers, it is clear that no business or industry can fully insulate itself from MCS.

The symptoms of MCS are extraordinarily varied and involve most systems of the body.[8] In many cases the condition presents similarly to an allergic reaction, which may result in under-reporting of mild cases of MCS.[9] As with the triggers listed above, not all symptoms affect every MCS patient, but to meet diagnostic criteria the patient must experience a variety of symptoms affecting different areas of the body:

> Symptoms reported by sufferers can include headaches, burning eyes, nose or throat, concentration or memory lapses, nausea, stomach problems, muscle pain, dizziness and fever, asthma or other breathing problems, fatigue, depression or mood swings, sleeping problems and eczema.[10]

[5] Mariko Saito et al, 'Symptom Profile of Multiple Chemical Sensitivity in Actual Life', *Psychosomatic Medicine*, no.67, (2005), p.318.
[6] "What is Multiple Chemical Sensitivity?"
[7] Jonathon Wilson, "Multiple Chemical Sensitivity: a chronic complex multi-organ disease," MCS Australia, accessed 8 September 2011, http://mcs-australia.org/pdf/mcs.pdf
[8] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.19.
[9] "What is Multiple Chemical Sensitivity?"
[10] Jim Fitzgerald in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.20.

The above listed are only the most common of symptoms; with nearly 150 different symptoms reported by patients.[11] Many symptoms are extremely distressing and could be very dangerous if experienced in the workplace. These symptoms have a significant impact on a person's capacity to function in society, both in the workplace and the greater community. This will be discussed in greater detail in section 4.1.

2.2 Co-morbidity

There are a number of conditions that share common symptoms with MCS, which is likely to have contributed to the under-reporting of the condition. MCS overlaps with toxic encephalopathy, chronic fatigue syndrome (CFS), fibromyalgia, Gulf War syndrome, and peripheral neuropathy amongst others.[12] The strongest connections are drawn with CFS, fibromyalgia, and post-traumatic stress disorder (PTSD), to the point that some medical researchers are looking to identify a common causal mechanism between these conditions.[13] Most of these conditions are considered "unexplained" as they are not consistent with current knowledge of toxicology, which has caused a division in the medical profession, explained by Dr. Mark Donohoe:

> Any time medicine does not have a good theory to understand what is presented to us as doctors, a division – a kind of schizophrenic approach – happens within medicine. The clinicians see the cases and document them; the text books say it cannot be true. On the whole, we believe our text books until such time as the theory can match the observations. It has happened with epilepsy and migraines.[14]

The biochemical mechanisms of the above conditions are not readily explainable and are consequently often dismissed as imaginary or psychologically triggered. This argument is apparently supported by the perceived co-morbidity with conditions such as anxiety and depression,[15] however some have claimed that such conditions are in fact symptoms of MCS, and are exacerbated by the continued denial of the

[11] Peter Evans, "Submission to the Office of Chemical Safety / National Industrial Chemicals Notification and Assessment Scheme Scientific Review of Multiple Chemical Sensitivity: Identifying Key Research Needs," South Australian Task Force on Multiple Chemical Sensitivity, accessed 31 August 2011, http://sacfs.asn.au/download/SATFMCS%20Submission%20to%20MCS%20Review.pdf, p.23.
[12] Wilson, "Multiple Chemical Sensitivity"
[13] Martin Pall, *Explaining "Unexplained Illnesses"*, New York: Harrington Park Press, (2007), p.1.
[14] Donohoe in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.73-74.
[15] Elise Caccappolo-van Vliet et al, 'Anxiety Sensitivity and Depression in Multiple Chemical Sensitivities and Asthma', *Journal of Occupational and Environmental Medicine*, vol. 44 no. 10 (2002), p.890.

condition's severity.[16] Recent research into the causes of MCS has all but dismissed the argument that it is a psychogenic condition.[17] Regardless of the nature of the causal mechanism, there is no denying that the symptoms experienced by patients are extremely distressing and significantly affect every aspect of a person's life. Acting to improve working conditions for MCS patients will automatically improve conditions for those suffering from other co-morbid conditions, but some additional specialised policy may also be required for other illnesses.

2.3 Prevalence

According to two random telephone surveys of adults conducted in 2002 and 2004, nearly 1% of South Australians suffer from medically diagnosed multiple chemical sensitivity, and over 16% experience some degree of chemical sensitivity.[18] The same survey also found a significantly greater prevalence amongst women than men, corroborating what had previously been observed overseas.[19] It is possible that the higher representation amongst women is in part due to the role of fragrances and cosmetics, which account for a large proportion of chemical sensitivities, but there is inadequate data to confirm this theory. What is apparent from existing data is that MCS most affects people over 30 years of age, Caucasians (70%) and women (63.7%).[20] It is believed by some that MCS is at least as common as diabetes.[21] Among the general public there is little awareness of MCS, but there is nonetheless a firm belief that MCS is a real and serious condition.[22] If chemical sensitivity is affecting 1 in 6 adults there is potentially a significant proportion of the population suffering varying degrees of discomfort or disability that can in many cases be alleviated or improved.

[16] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.90
[17] Pall, "Multiple Chemical Sensitivity: Toxicological and Sensitivity Mechanisms" (2009), p.1-2.
[18] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.33
[19] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, 33-34; Spencer and Schur, 'The Challenge of Multiple Chemical Sensitivity', p.25.
[20] Courtney Vierstra, Phillip D. Rumrill, Lynn C. Koch and Brian T. McMahon, 'Multiple Chemical Sensitivity and Workplace Discrimination: The National EEOC ADA Research Project', *Work*, vol.28 no.4, (2007), p.391.
[21] Evans, "Submission" p.25
[22] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.34

3.0 Existing Policy and Recognition

Arguably the biggest obstacle in developing effective policy pertaining to MCS is the general lack of recognition from the medical profession. This lack of recognition fosters apathy which erodes the political will to act.[23] The medical issues surrounding MCS are well documented elsewhere, most notably in the recent NICNAS/OCSEH report *Identifying Key Research Needs*.[24] MCS is currently considered a legitimate disability rather than a disease. The next section of this report is a brief overview of government developments over the past decade.

3.1 Australia

3.1.1 Social Development Committee Inquiry

In 2005 a report was tabled for the South Australian Legislative Council regarding the state of MCS in South Australia, including known triggers and symptoms, prevalence, and the life impact on sufferers. The inquiry was exhaustive and collected testimonials from medical professionals and MCS sufferers, and concluded with a number of largely passive recommendations, most of which have not been acted upon. One recommendation that was accepted and implemented was the formation of an MCS Reference Group comprised of "representatives of relevant Government departments and agencies…professional bodies and organisations, community groups, and councils."[25] This group has subsequently agitated for no-spray registries to govern the use of herbicides and pesticides, contributed to the NICNAS scientific report, and is currently developing materials for GP education to ensure that valid cases of MCS are properly acknowledged and diagnosed.

The Department of Health was supportive of most of the recommendations made by the inquiry,[26] but beyond the creation of the reference committee and public health fact sheet the recommendations have not been achieved and little tangible progress

[23] Spencer and Schur, 'The Challenge of Multiple Chemical Sensitivity', p.25.
[24] NICNAS and OCSEH, *A Scientific Review of Multiple Chemical Sensitivity*
[25] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.4.
[26] Department of Health, *Response to the Social Development Committee Inquiry into Multiple Chemical Sensitivity (MCS) November 2005*, Adelaide, 2005.

has been made in the subsequent six years. However, there have been some minor successes in improving the condition of public policy relating to MCS.

3.1.2 Disability Access

For the purposes of Australian employment, MCS is considered to be a disability. Job Access, an organisation designed to aid in the employment of the disabled, provides the following recommendations for the chemically sensitive:

> People with multiple chemical sensitivity syndrome usually control symptoms by limiting exposure to the suspected cause. As a result, changes may need to be considered in the workplace to limit a person's exposure to the problem substance or substances.
>
> As chemical compounds can be associated with new clothing, building products, chemicals used within the workplace and even fumes associated with driving to and from work, each individual case needs to be considered uniquely. The use of protective gloves and clothing to minimise skin contact with compounds and respiratory masks to reduce inhalation of compounds may be of some assistance (MDA Internet 2005-2008).[27]

Job Access' suggestions are vague and lacking in many key areas identified elsewhere, but what is significant in the above is the acknowledgement that MCS can inhibit a person's capacity to work. Such an acknowledgement should help to call attention to the status of MCS as a disability, and provide a starting point for government departments to form their own policy.

The 2006-2009 Disability Action Plan developed by the Department for Administrative and Information Services (DAIS) featured a number of measures to improve the workplace for people with MCS. These measures included control conditions on the use of deodorisers, cleaning products, fit-out materials and emergency evacuation procedures.[28] It is also significant for having explicitly identified multiple chemical sensitivity as a target area deserving of specific recommendations.

[27] "Multiple Chemical Sensitivity Syndrome," Job Access, accessed September 8, 2011, http://www.jobaccess.gov.au/Advice/Disability/Pages/Multiple_Chemical_Syndrom.aspx
[28] Department for Administrative and Information Services, *Disability Action Plan 2006-2009*, Adelaide, 2006.

MCS falls within the scope of both definitions of 'disability' used in the Centrelink Disability Action Plan 2010-2013, but the condition is not mentioned explicitly. [29] The measures recommended to ensure retention of disabled employees are largely based on education and training, which could easily be drafted in a manner which includes considerations necessary to accommodate MCS.[30]

More significant is the action taken by the Department for Transport, Energy and Infrastructure (DTEI) in South Australia. In 2006, DTEI revised its disability access guidelines for government owned and leased premises, including a new checklist regarding MCS:

> Part 3 of the Guide: provides a checklist of the likelihood of low-level atmosphere contaminates within the building environment, with the objective to minimising contaminate exposure levels to persons with Multiple Chemical Sensitivity (MCS) so they are not undeservedly affected.[31]

The checklist consists of 11 points covering smoking, pest management, ventilation and toxic exposure (see Appendix B). Whilst these guidelines currently apply only to government buildings, application across all workplaces would make a significant difference in preventing and managing milder cases of MCS. DTEI moved independently to formally recognise MCS as a disability irrespective of the lack of medical classification, an action that sets a precedent for other government departments to follow. Although the biochemical root cause of the condition is still being debated, there is enough knowledge about incitants and symptoms to acknowledge the condition as a serious illness, and make appropriate concessions to ease the burden on MCS patients.

[29] Centrelink, *Centrelink's Disability Action Plan 2010-2013*, p.5-6.
[30] Centrelink, *Centrelink's Disability Action Plan 2010-2013*, p.20-21.
[31] Department for Transport, Energy and Infrastructure, *Disability Access Checklist Guide for Government Owned and Leased Premises,* Adelaide, 2006.

3.1.3 Hospital Guidelines

SA Health has also taken some action, adopting the Royal Brisbane and Women's Hospital MCS guidelines for South Australian hospitals.[32] These guidelines were designed with the aim of helping health care professionals and hospital staff deal with patients admitted for a separate illness or injury who happen to suffer from MCS in a manner that would not exacerbate their condition. These guidelines include procedures for admittance, treatment, cleaning, emergency department, and personal hygiene of hospital staff, among others.[33] While South Australia adopted these guidelines in May 2010, Queensland hospitals have recently abandoned them, with no official reason stated. However, given that all disability concessions are underpinned by the notion of reasonable accommodation, it seems likely that the Royal Brisbane and Women's Hospital decided that the conditions placed too great a burden on staff.

3.1.4 NICNAS Report

A second major report regarding MCS was completed in November 2010, this time undertaken by the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) and the Office of Chemical Safety and Environmental Health (OCSEH) for the federal Department of Health and Ageing. This report focuses on the medical aspects of MCS, where the SDC Inquiry had considered all aspects of the condition. Consequently the NICNAS report is more concerned with detection, diagnosis and treatment of the condition itself, rather than means by which the afflicted can continue to function in society. This report is essentially a means of establishing which areas require a greater research priority, rather than a recommendation for immediate action, however the report does recommend a greater degree of education and training within the medical profession, which is vital to any further development regarding MCS.[34]

[32] NICNAS and OCSEH, *A Scientific Review of Multiple Chemical Sensitivity,* p.2
[33] SA Health: *Multiple Chemical Sensitivity: Guidelines for South Australian Hospitals*, Adelaide, 2010.
[34] NICNAS and OCSEH, *A Scientific Review of Multiple Chemical Sensitivity,* p.7

3.1.5 South Australian Strategic Plan

The 2011 South Australian Strategic Plan contains many targets that would benefit from the adoption of a consistent workplace policy regarding MCS. These relevant and mostly interrelated targets span many sections of the report and are summarised in Table 1.

Table 1: SA Strategic Plan

No	Target	Description
23	Social Participation	Increase the proportion of South Australians participating in social, community and economic activities by 2020.
36	Labour Productivity	Exceed Australia's average labour productivity growth rate through to 2020.
47	Jobs	Increase employment by 2% each year from 2010 to 2016.
49	Unemployment	Maintain equal or lower than the Australian average through to 2020.
50	People with Disability	Increase by 10% the number of people with a disability employed in South Australia by 2020.
85	Chronic Disease	Increase, by 5 percentage points, the proportion of people living with a chronic disease whose self-assessed health status is good or better.
86	Psychological Wellbeing	Equal or lower the Australian average for psychological distress by 2014 and maintain thereafter.

A strong workplace accommodation policy would immediately improve the conditions of all of the above listed items, among others not included in Table 1. An effective policy would help patients with minor cases of MCS gain and retain employment, although more severe cases would still require specialist attention.

3.2 Overseas

3.2.2 Europe

Germany was the first country to officially recognise MCS as a disease, gaining an ICD-10 classification in 2000 under the category of allergies.[35] In 2009, it was also recognised as a physical illness under the National Health Care System.[36] Also in 2009, Austria recognised MCS under the same classification, effectively ending the psychological argument in those two countries.[37] Although the category of allergy is misleading and far from ideal, it is nonetheless a big step forward. Although the condition presents similarly to an allergy, it also meets some of the criteria of poisoning. In light of this Peter Evans, a member of the South Australian reference committee, has prepared a recommendation for classification in the Australian Modification under a proposed new chapter title "Environmental Diseases."[38]

3.2.3 USA and Canada

In the United States, MCS patients have been eligible for disability benefits since 1989.[39] More recently, amendments to the *Americans with Disabilities Act* made in May 2011 have improved the position of American workers whose MCS is mild enough to allow them to retain employment.[40] Furthermore, the amended legislation does not compel employers to make unreasonably large concessions to retain MCS afflicted staff, which should help to assuage the fears of big-business lobby groups fearing strict laws and harsh penalties for breaching them.[41] However, recently, when the City of Detroit refused to implement a scent-free policy in the office, an MCS

[35] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p76
[36] Christiane Tourtet, "Germany is the First Country to Recognize Multiple Chemical Sensitivity (MCS) as a Physical Disease," American Chronicle, accessed 8 September 2011, http://www.americanchronicle.com/articles/view/88560
[37] Silvia K Müller. "Austrian Government Recognizes MCS as a Legitimate Disease," ME/CFS Australia, accessed 8 September 2011, http://sacfs.asn.au/news/2009/07/07_31_austria_recognizes_mcs.htm
[38] Evans, "Submission", p.12-13.
[39] Martin Silberschmidt, 'Multiple Chemical Sensitivity', *Danish Protection Agency Environmental Project* (2005).
[40] Michael J, Walkup, "Changes in the Americans with Disabilities Act may affect people with Multiple Chemical Sensitivity," The Canary Report, accessed 8 September 2011, http://www.thecanaryreport.org/2011/04/28/ada-multiple-chemical-sensitivity/
[41] Walkup, "Changes in the Americans with Disabilities Act"

afflicted employee successfully sued for both a financial settlement and the institution of the original policy.[42] This indicates that under the ADAA, scent-free policies are considered to be a reasonable accommodation for employers to make, which sets a precedent for wide-ranging scent-free policies in Australian workplaces.

Action has also been taken on another common trigger; cleaning products. The General Assembly of the State of Illinois instituted in 2007 a policy mandating the use of 'green' cleaning products in state owned school buildings.[43] State law also requires all schools in the State of New York to use green cleaning products.[44] The Green Cleaning New York web site offers significant support to make green cleaning the easier and more desirable choice, including a comprehensive register of acceptable cleaning products.[45]

The Canadian Human Rights Commission is also explicit regarding non-accommodation of MCS as a form of disability discrimination:

> "This medical condition is a disability and those living with environmental sensitivities are entitled to the protection of the Canadian Human Rights Act, which prohibits discrimination on the basis of disability. The Canadian Human Rights Commission will receive any inquiry and process any complaint from any person who believes that he or she has been discriminated against because of an environmental sensitivity. Like others with a disability, those with environmental sensitivities are required by law to be accommodated.[46]

There are clearly strong, supportive words in North America, but in terms of *uniform* policy there is little in operation. There are encouraging signs at state level, and the seriousness with which disability discrimination is viewed in Canada and the United States should encourage employer compliance in Australia.

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[42] "Multiple Chemical Sensitivity and the Law," Gerboth Law Offices, accessed 8 September 2011, http://www.gerbothlaw.com/2011/01/20/multiple-chemical-sensitivity-and-the-law/

[43] Illinois General Assembly, *Green Cleaning Schools Act,* Springfield, 2007, http://www.ilga.gov/legislation/publicacts/96/096-0075.htm

[44] "New York's Green Cleaning Program," New York State Office of General Services, accessed 28 September 2011, https://greencleaning.ny.gov/

[45] "New York's Green Cleaning Program."

[46] "Scent-Free Policy for the Workplace," Canadian Centre for Occupational Health and Safety, accessed 8 September 2011, http://www.ccohs.ca/oshanswers/hsprograms/scent_free.html

4.0 Economic Implications

Aside from the serious health concerns generated by MCS, there are also significant economic implications if MCS continues to be ignored. It has been claimed that the cost of MCS to Canada (including lost income) is around $13 billion per year, which based on the similar prevalence of the condition and national GNP would imply a comparable cost to Australia.[47] If the South Australian prevalence established in the SDC inquiry is extrapolated across the country, the number of MCS patients unable to work would be close to 200,000, a significant number to lose from the work force. In New South Wales the prevalence is known to be higher, which would indicate a higher national prevalence than has been reported in South Australia.[48] Although the most extreme cases of MCS are unable to be reasonably accommodated, there is no question that many affected people would be able to maintain employment with a few simple and cost-effective concessions that would not only benefit MCS patients, but all workers.

4.1 The Cost to Employees

A study conducted in Canada found that out of a sample of 268 people with MCS, 205 lost their jobs or were forced to quit as a direct result of "intolerable chemicals in the workplace." [49] Given that Australia is generally less MCS-friendly than Canada, the percentage of job loss is likely to be higher. In New South Wales, 2 per cent of the total working population were unable to work due to their condition.[50] Some people may be able to continue working from a rigidly controlled home office, but those who are unable to find such employment would find themselves struggling socially and economically, especially if they do not have a partner or carer to support them financially. Furthermore, if the condition is developed relatively early in a person's career, they may be unable to develop sufficient career skills to find another job.[51] Alternatively, an MCS patient may be highly capable but unable to secure

[47] Evans, "Submission," p.25
[48] Donohoe in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.99.
[49] Gibson et al in Evans, "Submission" p.25
[50] Donohoe in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.99.
[51] Lynn Koch et al, 'An Ecological Approach to Facilitate Successful Employment Outcomes Among People with Multiple Chemical Sensitivity', *Work*, vol. 29 no.4 (2007), p.343.

employment due to a business' reluctance to make concessions.[52] In the present economic climate, a person suffering from moderate to severe MCS may be considered unemployable.

4.2 The Cost to Employers

MCS is covered under the Australian *Disability Discrimination Act 1992*.[53] Consequently, employers must be careful to make reasonable concessions where appropriate, or risk legal action as seen in section 3.2.3. The current lack of consensus makes the process of accommodating MCS afflicted employees more difficult:

> While it is necessary to accommodate disability under law, the need to provide some form of access must be balanced against the level of access requested by people with MCS, and whether making such accommodations might place an unjustifiable hardship on the service provider.[54]

If the definition of reasonable concession was made externally, employers would be better protected from discrimination cases. A list of reasonable concessions could be constructed to assist employers in making accommodations that are mutually beneficial. Aside from potential wrongful dismissal litigation, employers may also find themselves forced to pay costly severance packages if the situation is deemed untenable, and at the very least would need to invest time and money in training new staff to replace those rendered unable to work. As mentioned above, a person suffering from MCS may be a very valuable employee that would represent a significant loss to a business; such a person's termination could be just as damaging for the organisation as the employee, particularly in smaller or specialist businesses.

[52] Koch et al, 'An Ecological Approach', p.346.
[53] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.106.
[54] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.107.

4.3 WorkCoverSA

There is a self-perpetuating circular flow at play within WorkCoverSA. A lack of diagnoses has led to a lack of claims, which has downplayed the need for policy, and a lack of policy has prevented claims from being successful. The lack of successful claims has hindered the establishment of a specific WorkCover classification code, which ensures that the diagnosis of MCS will not be accepted for compensation cases. This was made apparent in the SDC inquiry:

> WorkCover in SA advised the Inquiry that MCS was not a condition that had been prominent or of great cost or concern to the scheme. WorkCover's lack of a specific classification code for MCS, however, has meant that the authority is unable to ascertain the number of individuals seeking compensation, who may have the condition.[55]

Examination of WorkCoverSA claims data between the years 2002-2010 found no listings of chemical sensitivity, however it is likely that MCS is present but classified by its symptoms. For the 9 year period there are over 3000 claims labelled 'poisoning and toxic effects of substances.' Further refining of these results (including the removal of known toxins such as asbestos) indicated over 1200 cases of injury by chemical exposure. Some workers have even included the phrase "chemical sensitivity" in their description of the accident. Furthermore, cases that resemble common MCS diagnoses were found under anxiety/stress disorder, asthma, chronic bronchitis, emphysema and allied conditions, contact dermatitis, exposure to substances without current injury or disease, multiple injuries, other diseases, and other respiratory conditions due to substances.[56] A classification code for MCS would improve the accuracy of the WorkCoverSA claims data, and would assist many additional deserving claimants to receive compensation. WorkCover NSW has expressed a need for a legitimate and recognisable medical classification to facilitate compensation claims, but with no such classification forthcoming, alternative measures must be constructed and implemented in the interim.[57] The likely success of worker's compensation claims is debatable, however, given that MCS by definition

[55] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.99.
[56] WorkCoverSA Claims Data, 2002-2010.
[57] Donohoe in Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.74.

is a response to a concentration of chemicals that is considered to be harmless. As such, it could be difficult to justify compensation for contracting an illness that affects an estimated 1% of the population. In any case, worker's compensation should not occupy the highest priority. The top priority should be to ensure that individuals affected by MCS are able to continue working in some capacity. Establishing compensation prior to this will lower the incentive to keep MCS affected staff employed.

5.0 Recommendations

MCS is a complicated condition that is by nature impossible to entirely prevent, however the incidence of MCS can be reduced through a number of relatively simple measures. SafeWork SA's approach would by necessity be one of hazard reduction and risk management, with the acceptance that total prevention is impossible. Several measures may require inter-agency collaboration with other state government departments to achieve the best results. With the impending harmonisation of OHS laws, SafeWork SA's independence to act is limited. Nonetheless, the following recommendations may be feasible:

1. **Recognition.** As illustrated by the DTEI example, government departments do not necessarily require a medical consensus to construct policy pertaining to MCS. There is now enough common ground amongst medical researchers to justify workplace safety recognition, if not as a disease, than as a disability as shown by DTEI.
2. **Increase awareness.** There is little public knowledge about MCS and there can be little doubt that ignorance plays a significant role in workplace over-exposure. Ideally, SafeWork SA could provide a set of tools for employers to minimise the risk of employees experiencing MCS related symptoms, such as model policies that could be adapted to suit individual workplaces. Public advertising would also be highly beneficial, best undertaken in the form of printed advertisements rather than television or radio campaigns. More publicity around the month of May, MCS Awareness Month, would help generate awareness. Inclusion in SafeWork Week could also be very beneficial. SA Health has already commenced an awareness campaign, targeting professional gardeners with reference to chemical sprays (Appendix C).
3. **Include MCS considerations in Codes of Practice which would then be the subject of OHSW training.**
    a. **Define "reasonable accommodations."** A key source of conflict between MCS patients and employers are different perspectives on what is considered to be a reasonable accommodation, which

employers are required to make under the *Disability Discrimination Act 1992*. When left to the discretion of employers, very minimal concessions are achieved. SafeWork SA could devise a list of appropriate accommodations in consultation with relevant parties that could be incorporated into a code of practice. The following two simple but highly effective policies in wide use overseas would be an ideal starting point.

b. **Scent-free guidelines.** Fragrance is one of the most common triggers of chemical sensitivity.[58] Perfumes, air fresheners and soaps are encountered on a daily basis but can have an extremely detrimental effect on those experiencing chemical sensitivity. Such fragrant products are also among the easiest of triggers to remove from the workplace through simple scent-free policies. Said policies should initially be voluntary, but strongly encouraged and made widely available from SafeWork SA in the form of a model policy that can be adapted as necessary to suit each specific workplace. Canada, as mentioned earlier, is leading the way in these areas, and a handful of South Australian businesses have also voluntarily implemented scent-free guidelines.[59] This is a reasonable accommodation that could be incorporated into a workplace's dress code with minimal effort, but can significantly reduce the incidence and severity of chemical sensitivities.

c. **Indoor air quality regulations.** Ensure adequate ventilation systems are installed in new buildings and refurbishments. This too is not a benefit exclusive to MCS patients – all workers will benefit from improved air circulation. Such policies have been successfully implemented in Canada.[60]

4. **Adoption of DTEI checklist.** The DTEI checklist has been in use since 2006 relating to government buildings alone. SafeWork SA could adopt and adapt the checklist for use of the inspectorate, which would increase the number of chemical friendly workplaces.

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[58] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.30
[59] Social Development Committee, *Inquiry into Multiple Chemical Sensitivity*, p.80
[60] "Environmental and Workplace Health: Air Quality," Health Canada, accessed September 2011, http://www.hc-sc.gc.ca/ewh-semt/air/index-eng.php

5. **Chemical-Safe workplace registry.** It has been suggested that MCS patients should sign a registry allowing employers to make concessions for their benefit as necessary. Although it might assist in the condition of those already afflicted by MCS, it would have little if any preventative effect. It also raises issues of privacy by forcing patients to disclose their condition publicly. Most worryingly, it would make it extremely easy for employers to discriminate against MCS patients by not hiring them in the first place. But the registry idea does have some merit if adjusted. Instead of registering patients, workplaces that have fragrance-free policies, non-toxic/least toxic building materials, and environmentally friendly cleaning products could voluntarily sign a “Chemical Friendly Workplace” registry. This would allow those already suffering from MCS to establish which workplaces will best be able to accommodate their needs, and could potentially reduce unemployment amongst patients.
6. **Chemical-safe product registry.** Similar to recommendation 5, a list of chemically safe products could be compiled and made available to employers. Arguably this falls outside of SafeWork SA’s jurisdiction, but a readily available and frequently updated list of least toxic options could help employers select safer alternatives for their workplaces. Such a list could also be forwarded to employees to help them choose low-impact cosmetics. More scrutiny when selecting products for the workplace would not only assist those with MCS, but would be beneficial for all employees. Such registries exist internationally and are readily available online. It would be a relatively easy matter to adapt an American registry for products available in Australia.
7. **Universal Design.** It is impractical and unfeasible to suggest the demolition and reconstruction of existing buildings for the purposes of removing potentially toxic chemical compounds. The fact of toxic construction can be addressed only by ensuring that future projects use only non-toxic/least toxic materials. Again, this is not the responsibility of SafeWork SA, but a collaborative effort with DTEI may be in order. Monitoring of refurbishments would also be a key area.

Most of these recommendations can be accomplished inexpensively, simply by supplying workplaces with model policy. This can even be achieved electronically by

using the SafeWork SA website, further reducing costs. Similarly, adding to the duties of the inspectorate would only prompt a small increase in cost due to extra hours. Any awareness campaign is likely to be the most expensive of the proposed measures, but need only be a small initial outlay, as much of the necessary communication can be done electronically. In any case, the benefits derived from such measures would likely outstrip the initial outlay, as employment and productivity will benefit from keeping MCS patients in gainful employment as much as is reasonably possible.

6.0 Conclusion

The history of MCS to date is characterised by political ambivalence or outright opposition. With the medical profession still divided over its very existence, it is of no surprise that governments have shown reluctance in establishing uniform MCS policy. The general public is largely unaware of the severity of MCS, but public opinion can change rapidly, especially when pertaining to health issues. It was not long ago that the notion of banning smoking indoors was unthinkable, yet the Adelaide City Council is now considering banning cigarettes in outdoor public spaces, such as Rundle Mall. We have also seen the creation of disability parking spaces, modifications to public transport to accommodate wheelchairs, health warnings on cigarette packages, allergen advice on foodstuffs, and the compulsory “gamble responsibly” caveat on advertising. All of these conditions are now widely supported by the public.

It is in everybody’s interests to make the workplace more accommodating of those afflicted by MCS. Although the proportion of Australians suffering from MCS is quite low, their absence from the workforce generates a significant impact. If able to work, MCS sufferers will be contributing to building the economy, but if unable to work, patients may come to depend on welfare, increasing government expenditure, as well as becoming socially isolated.

Two SA Government departments have taken a degree of action on MCS in the past five years. It appears that a coordinated approach is still a long way away, waiting for

MCS to be formally recognised in the ICD-10AM. It will be easier to form effective policy when this occurs. But in the meantime there are measures that can be taken to improve the lives of those suffering from MCS. The cost of action is low. It can be reasonably argued that the cost of inaction is far more significant.

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Primary Data

WorkCoverSA Claims data, 2002-2010.

Appendix A: List of Acronyms

ADA (A)	Americans with Disabilities Act (Amendment) 2011
CFS	Chronic fatigue syndrome
DAIS	Department for Administrative and Information Services
DDA	Disability Discrimination Act 1992
DOHA	Department of Health and Ageing
DTEI	Department for Transport, Energy and Infrastructure
GNP	Gross National Product
GP	General Practitioner
ICD-10 (AM)	International classification of diseases – Version 10 (Australian modification)
MCS	Multiple chemical sensitivity
MS	Multiple sclerosis
NICNAS	National Industrial Chemicals Notification and Assessment Scheme
OCSEH	Office of Chemical Safety and Environmental Health
OHS	Occupational health and safety
PTSD	Post-traumatic stress disorder
SDC	Social Development Committee

Part 3 Checklist for Multiple Chemical Sensitivity

	Descriptive	Yes	No	Comments
1.	Cigarette smoking not permitted within 5 meters of entrance (ie; no smoking signs in place / easy to read, cigarette bins located away from front entrance)?			
2.	Are non-toxic / least toxic building materials used in construction/renovation and fit out?			
3.	Is there a pest management practice in place to avoid use of toxic pesticides and herbicides?			
4.	Are non-toxic fragrance-free cleaning products used?			
5.	Is it a smoke and fragrance-free work environment?			
6.	Is there adequate air exchange via HVAC system, or open ventilation, to avoid build up of indoor air pollutants?			
7.	Are least/non-toxic alternatives used in the selection of stationary and equipment?			
8.	Are areas of potential toxic exposure located away from air intakes for HVAC systems, and general work areas?			
9.	Are adequate warnings given before potentially toxic chemicals are used?			
10.	Is there a procedure in place to monitor indoor air quality?			
11.	Is the working space located away from source of car emissions and/or in a separate building from the car-parking garage?			

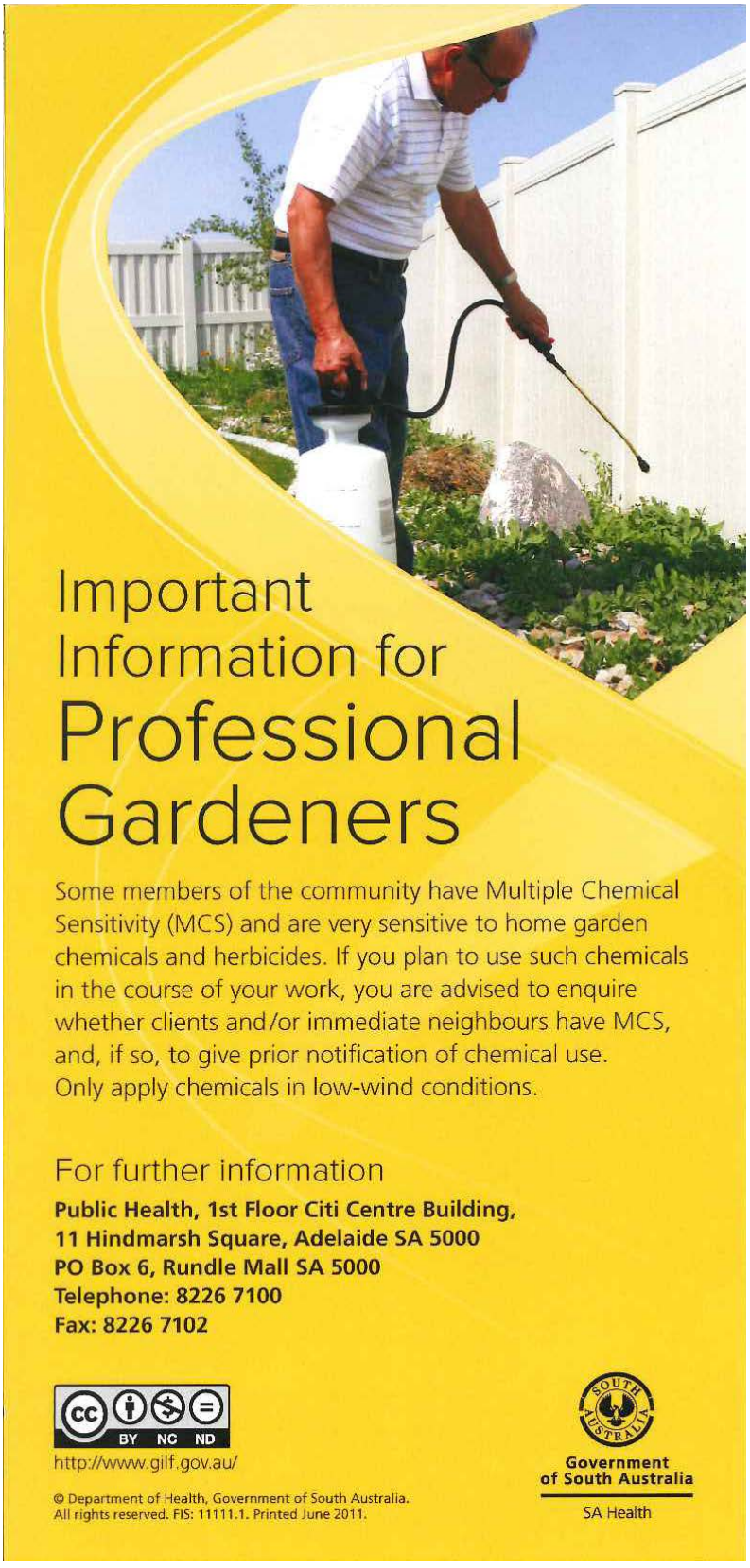
Overview of Assessment Findings:

References

Australian / New Zealand Standards
AS 1428.1 Design for access and mobility General requirements for access- New Building Work
AS 1428.2 Design for access and mobility Enhanced and additional requirements- Building and facilities
AS/NZS 1428.4 Design for access and Tactile indicators
HREOC: http://www.hreoc.gov.au/disability_rights/standards/Access_to_premises/premises_advisory.html - point5
DAIS web site: http://www.buildingmanagement.sa.gov.au/pdf/disability_access_guide.pdf
Building Code of Australia BCA

Further Information
DTEI Building Management Strategic Services
Stan Fuller Phone 82265225

Appendix C: Awareness materials



Important Information for Professional Gardeners

Some members of the community have Multiple Chemical Sensitivity (MCS) and are very sensitive to home garden chemicals and herbicides. If you plan to use such chemicals in the course of your work, you are advised to enquire whether clients and/or immediate neighbours have MCS, and, if so, to give prior notification of chemical use. Only apply chemicals in low-wind conditions.

For further information

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http://www.gilf.gov.au/

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