Experience backed commentary on the report of the Office of the Prime Minister's Chief Scientific Advisor (PMCSA) regarding:



Methamphetamine contamination in residential properties: Exposure, risk levels, and interpretation of standards (PMCSA Meth Report).

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#### 1 Introduction

The media response to the PMCSA Meth Report has, created a sense of frustration and anger on the part of many in NZ. That frustration and anger is focused on Housing NZ and the industry that has grown to provide services to those who want to mitigate risk exposure to meth residues in property.

It largely skips the fact that if people did not use or make meth, then this concern would never arise. And nobody appears interested in stepping back and considering that reality.

If the recommendations PMCSA Meth Report regarding acceptable levels of meth are correct, this is a good thing for everybody. Costs associated with managing fall out of illegal behaviour will reduce. However, contrary to the advice within the PMCSA Meth Report, the recommendations are out of step with what other jurisdictions are doing around the world as far as meth residues from use related behaviour are concerned. And again, nobody appears interested in stepping back and examining this.

The PMCSA Meth Report seems to reflect the general mood of NZ society when it comes to tackling the challenges meth presents to our society. We want to:

- hide behind statistics that downplay the extent of the problem and which don't stack up with the reality of meth in this country,
- pigeon hole all people who are in business and provide work for others as people who are only in it for the money,
- jump to the conclusion that the process which led to the publishing of NZS8510 was completely flawed and the Standard of no value, and most importantly
- see the problems associated with meth in property to diminish even if that means pretending the problems are not there

This commentary is intended to contribute to a discussion about an appropriate approach to managing meth in this country, that the PMCSA Meth Report has catalysed. It suggests courses of action that can build on the scientific approach the Office of the PMCSA has started, which will remove the doubts people may feel when they consider those aspects of the report that need clarification.

While the current political climate and housing market may mean the following statement holds water in situations where meth residues are historic, albeit there are differences among scientists internationally as to what this level should be, is it really the case where meth related behaviour is actively taking place?

"Trade-offs need to be considered, particularly within social housing, where the risk of being in an unstable housing situation is likely to be far greater than the risk of exposure to low levels of methamphetamine residues."

It is to be hoped an approach to this issue is adopted that begins to address the root cause of the problem, meth use and manufacture, rather than one which sweeps the evidence of this behaviour under the carpet.

Miles Stratford

What I

CEO MethSolutions and profoundly concerned member of the New Zealand public

# 2 Executive Summary

On Tuesday 29<sup>th</sup> of May, after many months of preparation, the Office of the Prime Minister's Chief Scientific Advisor (PMCSA) released its carefully considered report Methamphetamine contamination in residential properties: Exposure, risk levels, and interpretation of standards (meth report).

The report notes that meth residues get into property when meth is used or manufactured. So, meth residues are the result of what, for now at least, remains illegal activity. Any positive result for meth, is evidence of meth related behaviour.

#### **Key Points**

- If correct, the recommendation of the PMCSA Meth Report with respect to the harm caused by meth residues from use will deliver benefit to NZ and the world
- Other jurisdictions already apply levels ranging from 0.5μg/100cm² to 1. 5μg/100cm² for meth residues from manufacture AND use
- This fact is incorrectly represented in the report Australia is an example
- The PMCSA Meth Report does not reference research other jurisdictions have used to reach the lower levels they deem acceptable
- The PMCSA Meth Report recommends levels which are at least x10 higher than any other jurisdiction anywhere else in the world
- The Standard's Committee, used the recommendations in a report commissioned by the Ministry of Health, which was produced by ESR and which provided advice on the back of a comprehensive health risk assessment process
- There is a lack of research globally
- The recommendations regarding risk management are based on an incomplete assessment
  of the risk and the consequences associated with being exposed to the risk presented by
  people who choose and manufacture meth.
- If we wish to prove the hypothesis regarding meth residue levels in property that is a key output of the PMCSA Meth Report, we should capture data and record health effects, to fill this information gap for NZ and the world

#### If correct, the opinions of the PMCSA Scientists are a real positive for everybody.

As we have previously stated, if the opinions of the scientists within the PMCSA are found to be correct, this will be a good thing for all parties. Including MethSolutions and other providers of testing services. Costs will come down, without compromising health and wellbeing and emotional angst will reduce.

From an industry perspective, service providers will, for the first time, be able to point to a Government sanctioned reference document that provides the level of assurance people are looking for. Where other documents include uncertainties, a business providing advice to people has to reflect this, or face getting sued.

#### 'Leaps of Logic'

We have been told that New Zealand is the only place in the world, where a 'Leap of logic' has been taken that sees the same levels applied for meth contamination from use as manufacture. That advice is incorrect.

An example would be Australia, which the report incorrectly identifies as having Guidelines that apply to manufacture of meth only. Utah in the USA is another example. Both places that took the 'Leap of logic' long before the New Zealanders Professor Sir Peter Gluckman has been critical of.

Advice has previously been provided to the media that identified that statements in the PMCSA Meth Report were at odds with practice elsewhere in the world. If it has been explored by the media, it has not been a feature of the reporting.

#### A report with bits missing

The advice we have been provided by the PMCSA is essentially that no stone was left unturned when it came to research in preparing this report. On the face of it, 'rocks' which other jurisdictions have looked at and used to reach profoundly different conclusions appear to have been missed.

A review of the references, suggests that the PMCSA Meth Report and its conclusions were prepared without consideration of some of the science other jurisdictions have considered important when developing their Guidelines.

Real world research around health effects reported in properties where meth related was limited to use; sore eyes, itchy skin and skin complaints, sleeplessness and behavioural challenges, leading the researcher to believe that evidence of risk from third hand exposure to meth residues from use exists and more research should be done, was not considered persuasive enough to influence the outcomes of the report.

Clarification as to why the Office of the PMCSA did not consider all available research and how they reached such profoundly different outcomes, will remove uncertainties these apparent omissions create.

#### A flawed Standard?

The tone of the report and the way it is structured, directly feeds the narrative that has been run in New Zealand for some time, by the likes of the NZ Drug Foundation. Specifically, that the meth testing industry serves no purpose and that the process that led to the development of NZS8510 was flawed, as is the Standard it produced.

There is no basis for this conclusion. Particularly as the Standard was directly informed by the same scientific report the PMCSA Meth Report has used. The development of NZS8510 was focused on making sure that any levels included in the result were informed by science that had accounted for health risks and would be workable.

#### The opportunity created by lab backed testing for meth residues in property

Testing for methamphetamine residues using lab backed analysis, is a vital tool for those property owners who wish to actively manage use and manufacture of meth. Without it, there is limited, if any, incentive for a person with a meth habit to take their behaviour outside.

Testing using lab backed analysis, provides early evidence of meth related behaviour. Certainly, it can be used to hold occupants accountable for their actions. Actions which for the time being remain illegal. Equally, it can be used as the catalyst for a proactive intervention by the property owner that sees the person's meth use addressed, reducing the likelihood of the behaviour continuing. This is particularly relevant where the property owner is the likes of HNZ or a social housing group.

With HNZ already changing its policy around meth testing of property, it appears that Labour, a party ostensibly focused on those with mental health and addiction issues, has missed a golden opportunity to develop a strategy to provide targeted assistance to those in need.

Meth is an expensive habit and a poor person with a meth habit is far more likely to remain impoverished, than one who does not.

#### Recommendations need to be supported with real world evidence

At this time, the recommendations of the PMCSA Meth Report are not supported by real world evidence, even though they have been seized upon and reported as if they are. It is to be hoped they are correct, as they will see the harm caused by meth use reduced.

However, what the report proposes, is a radical departure from policy adopted overseas, where Guidelines remain in place for manufacture AND use. If such a change is to be implemented, it should be backed up and supported with the real world evidence that is there to be gathered, once recommendations are implemented. As noted in the PMCSA Meth Report, this research does not currently exist. But if we are to go down the road proposed by the PMCSA Meth Report, we must do this in a way that increases confidence and certainty.

#### A Scientific Way Forward

Something the PMCSA Meth Report has identified, is that there is a lack of real world research around the subject of third hand methamphetamine residues. This report and the debate it has created should be seen as a great opportunity to put the issue of third hand meth residues to bed once and for all.

The recommendations of the PMCSA Meth Report regarding health risk, form the basis of a hypothesis around the levels of meth accumulated from use alone, that create health effects.

In accepting this report as being a representation of fact, our political leaders have identified that they wish to test this hypothesis on the people of New Zealand. If this is to happen, it should be done in a scientific way. Variables such as mould, lead, asbestos and meth habits will need to be accounted for and evidence and data recorded, measured and tested.

This experiment will mean we can be confident that a change in acceptable levels will not be compromising health and wellbeing as a result of following the recommendations in the PMCSA Meth Report. This will see hundreds of millions of dollars saved around the world each year.

To do otherwise, would see yet another opportunity to create certainty missed.

#### Funding the research

Funding for the research should be sought from the Proceeds of Crime fund. This fund, has tens of millions of dollars in it and is significantly contributed to by seizures from meth criminals.

#### Key considerations when completing this scientific experiment

The fallout from the PMCSA Meth Report has been revealing. It adds to the things that should be considered in taking this scientific experiment forward.

In particular, the furore around compensation off the back end of the PMCSA Meth Report, from people whose lives and investments have been compromised by adherence to the *de facto* standard

of the day, thought should be given to how those who participate in the experiment will be compensated IF the hypothesis is found to be incorrect.

#### Opportunities to reduce harm caused by meth

Where money is saved by not repairing public housing, it can be invested into things that make a difference around meth:

- preventative education that focuses on good choices around things like meth,
- community support for people who are having to deal with the consequences of meth related behaviour, which focuses on active behaviour change and does not wait for a person to be 'ready to change', and
- proactive addiction treatment services.

In this way, money currently being spent on addressing a symptom of our meth problem, can be used to target the root cause of the problem - the decision people make to pick up the meth pipe.

#### Impact of the Report's Conclusions

The PMCSA Meth Report has not recommended a scientific investigation of the reality of the health effects associated with third hand exposure to meth residues. Nor has it encouraged politicians to consider wider implications of meth residues in property. Both things which will improve health outcomes for people.

Instead, the report, recommends an approach to testing that will see the problem 'disappear'. One which will allow meth related behaviour to go unchecked. This is because these recommendations where an environment in which first and second-hand exposure to meth residues can occur behind closed doors. From there, it can spill out onto the streets, increasing the risk to members of communities who want nothing to do with meth, but are living in communities where many do.

If people follow the advice in the PMCSA Meth Report, there will be significant negative health and social outcomes to the individuals and their families, in homes and communities where meth use is a reality.

#### Conclusion

New Zealand has lead the world in developing an approach to managing the various risks presented by meth use and manufacture. The parties involved with doing so have been criticised.

A report has been prepared that recommends changes to what are considered acceptable levels of meth residues which are out of step with overseas jurisdictions. It also recommends an approach to risk management, that increases risks presented by meth for those who follow it.

If the recommendations to raise levels proceeds in an unmodified fashion, it is to be hoped that the once in a lifetime opportunity this presents to put scientific rigour around what levels of meth residues present a risk from third hand exposure is not lost.

# 3 Meth in NZ- Loss Likelihood Assumptions

The PMCSA Meth Report provided a context for considering the challenges presented by meth affected property. On the strength of these, the report concluded that the likelihood of coming across a property where meth manufacture had occurred, or where high levels of meth use had occurred, was low.

The challenge for the authors is that they have relied on official statistics. Adopting this approach can be defended on the basis of having to deal with evidence backed statistics. However, our ongoing desire to avoid the realities identified by other indicators of risk, is one of the reasons why we have such profound issues with meth in this country.

Even working within the officially reported figures, it is possible to draw different conclusions from those described in the PMCSA Meth Report.

Page 9 of the reports reference Ministry of Health figures to note; "in recent years around 1% of the population has used the drug". The report goes on to note that this happened "mostly casually", suggesting a permissive attitude toward illegal drug use that is shared by many New Zealanders.

The researched backed estimate has been around for some time. And while it is incongruent in terms of the widespread nature of meth residues in property and the reports around increased seizures of pre-cursors and methamphetamine, it is currently the only statistic we have available.

# 3.1 Use of Police lab busts as the basis for estimating risk exposure

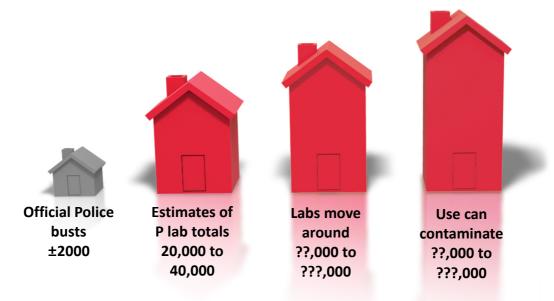
The significance of this relates to the risk presented by manufacture. The PMCSA Meth Report has focused on the number of labs that were busted. While it is a valid number, it actually bears no reality to the risk itself.

#### For example:

- Police do not bust 100% of the labs that are operating in a given year. The estimates as to
  the relationship between lab busts and labs that are operating vary. But they have a
  multiplier effect on the base number and this reality has not been accounted for in the
  PMCSA Meth Report.
- In addition, many meth users, have tried to make meth. For example the Massey University Illicit Drug Monitoring System, reported in 2011, that of frequent meth users (estimated to be around 25,000 at that time) 32% had tried to make meth. If that number was correct and the attempts to manufacture all occurred in only one property and happened only once, then in 2011, there would have 8000 attempts at making meth. This reality has not been accounted for in the PMCSA Meth Report.
- In addition, what the PMCSA Meth Report failed to consider is that meth labs are highly
  mobile and meth cooks will sometimes split the manufacturing processes into two stages.
  Both of these strategies are adopted in order to limit the risk of detection. This reality has
  not been accounted for in the PMCSA Meth Report.

In addition, the big challenge we face, is that meth residues can be very persistent. So, the number of properties where there are health risks from un-remediated meth labs, is greater again. Nobody knows how many properties have had meth labs operate in them. But, when all the above figures are rolled back into the risk assessment model, the likelihood of coming across a property where

meth has been manufactured is far greater than the report suggests.



Estimate of number of properties seriously affected by meth in NZ in the last 20 years.

#### 3.2 Risk Management involves Likelihood AND Consequence of Loss

The PMCSA Meth Report has adopted a narrow view of risk. They have limited their considerations to health effects. Given their remit this is understandable. However, the advice they have provided, is far more general in nature.

The economic implications of buying a property where significant meth residues are present, are profound. The issue is hidden. The report notes that meth labs should still be cleaned up to the levels currently seen under NZS8510. Nobody will compensate the people who follow this advice.

Yet the report's authors have advised that meth testing should not be done as a matter of course.

#### 3.3 The impact on risk exposure brought about by meth testing

Since meth testing of property has become more widespread, the number of properties sitting with in the property pool where meth manufacture risk has not been addressed, has reduced significantly. This is only because people became aware of the risk and were provided with low cost high quality testing that was backed by lab analysis.

Issues have been identified that would otherwise have been missed. In the absence of this service, people have ended up buying properties that have the potential, even by the recommendations of the PMCSA Meth Report to compromise their physical, financial and emotional wellbeing.

The real estate industry is governed by the principle of 'buyer beware'. There is no compensation open to property purchasers who unwittingly purchases a former meth lab. Given this, making recommendations to the public of New Zealand that they do not routinely test property, seems reckless. Particularly given the report seems to grossly underestimate the likely exposure risk

# 4 Errors and Omissions in the PMCSA Meth Report and subsequent communications

The PMCSA Meth Report has been presented to the public of New Zealand as the definitive report into meth residues in residential property. The scientific credentials of the authors are robust. However, a principle of scientific reporting is that the research is complete, balanced and advice provided accurate.

#### 4.1 'Leap of Logic' – guidelines for residues manufacture and use

In follow up communications with the media, the report's authors have suggested that only in New Zealand has the above leap of logic been taken. This is not correct. Other jurisdictions around the world have in place Guidelines that apply to meth residues from meth manufacture AND use.

This advice from the Office of the PMCSA is the focus of much of the follow up commentary.

# 4.2 Overseas Guidelines – Australia 0.5µg/100cm<sup>2</sup> use or manufacture

Page 21 of the PMCSA Meth report includes a table referencing different Guidelines around the world. It identifies the Australian Guidelines for clean up as only applying to meth labs.

These Guidelines were published in 2011 by the Australian Crime Commission. While focused on cleaning up labs, include these words on page 16 under 5.2.4 which are unambiguous.

Methylamphetamine synthesis (or "cooking") operations will contaminate inside surfaces of buildings with residual methylamphetamine. Studies have also established that smoking methylamphetamine will likewise contaminate the inside surfaces of buildings with methylamphetamine. Regardless, the presence of methylamphetamine on inside surfaces at a level of greater than 0.5 micrograms ( $\mu$ g) per 100cm² is considered unacceptable.

The appropriateness of these guidelines was reinforced by EnHealth in 2017. Page 4 of the report states that meth risk is relevant whether it has been used or manufactured <a href="https://www.health.gov.au/internet/main/publishing.nsf/content/A12B57E41EC9F326CA257BF0001F9E7D/\$File/wClandestine-Drug-Laboratories-Public-Health.docx">https://www.health.gov.au/internet/main/publishing.nsf/content/A12B57E41EC9F326CA257BF0001F9E7D/\$File/wClandestine-Drug-Laboratories-Public-Health.docx</a>

So, clean up Guidelines in Australia apply where meth has been manufactured AND used and the PMCSA has incorrectly advised that they do not.

The table on Page 21 and associated commentary make it look like NZ is alone in considering meth from use when it comes to clean up of property.

The table also excludes the work done in States such as Utah. We further understand that the State of Colorado does not distinguish between meth residues from manufacture or use, when it considers which Guideline levels to apply.

### 4.3 Overseas Guidelines – Utah 1.0μg/100cm<sup>2</sup> use or manufacture

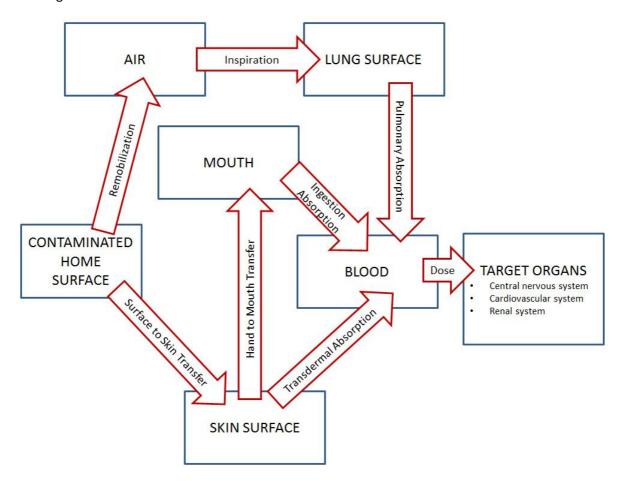
The State of Utah<sup>1</sup> undertook a multi agency review on behalf of the people of Utah in 2015. This review reconfirmed a limit of  $1.0\mu g/100 cm^2$  that was originally established in 2010. This review took place against a background of economic pressure from apartment owners' lobby groups, to increase levels due to the cost of meeting the guidelines that had been set.

The limit applies for meth whether it is from use or manufacture.

The risk assessment model Utah Department of Health used is shown below. It includes inhalation pathway risk. This exposure pathway was not considered by ESR in the report they provided for the

Ministry of Health which in turn informed the decisions of the NZ Standards Committee. This is because the ESR report established Health Risk Based post decontamination levels for properties where meth had been used or manufactured.

Given the PMCSA Meth Report is proposing much higher levels of meth residues are adopted before and cleaning is done, it would seem prudent to consider the inhalation pathway risk, before finalising recommendations and conclusions.



The Utah decisions were taken using a risk assessment model which did consider inhalation pathway exposure risk. They were also made after considering a range of scientific inputs, some of which are not referenced in the PMCSA meth report.

#### 4.4 Missing Research

A review of the references in the PMCSA Meth Report suggests the 2014 work of Van Dyke, Martyny et al<sup>2</sup> was not considered by the report. Although other reports they have written was. This work suggests the conclusions reached in the PMCSA Meth Report may be incorrect. This work has influenced the thinking in other jurisdictions where social housing pressures may not be as great.

The summary of this research includes these words:

"Based on our estimates of dermal transfer efficiency, a surface contamination clearance level of  $1.5 \,\mu\text{g}/100 \,\text{cm}(2)$  may not ensure absorbed doses remain below the level associated with adverse health effects in all cases".

Clearly this language is in stark contrast to the PMCSA Meth Report. And, taken at face value, it would appear to justify the 300 times buffer (page 16 PMCSA Meth Report) that ESR built into their

2016 report to the Ministry of Health<sup>3</sup>. It is this ESR health risk assessment that informed the numbers in NZ8510, not the 'self-serving' interests of the meth testing and decontamination industry.

Clarifying how/why this research (and others considered by the Utah Department of Health) was missed/considered/interpreted, given how extensive we are told the research undertaken by the PMCSA was, and confirming the impact it has on the confidence to reduce this buffer to 30 times (page 29 PMCSA Meth Report) would greatly increase confidence in the findings and conclusions.

The PMCSA Meth Report does acknowledge engagement with Dr. Jackie Wright. Dr. Wright is Australian and operates independently of the meth testing and decontamination industry. Dr. Wright has funded her own research as few Governments have seen the importance of doing so. Dr. Wright's PhD focused on Meth lab contamination<sup>4</sup>. The research included scenarios which were properties where use related behaviour had occurred. Dr. Wright has also informed the development of the 2011 Australian Federal Guidelines and continues to have her advice sought by the Federal Government in Australia.

Some of the parties who Dr. Wright interviewed as part of her research were exposed to meth residues from use alone. The observed health effects were similar whether the house had meth residues present from use or manufacture. A summary of results are shown over page.

Of the case studies in the table below, the first was from a property where manufacture occurred.

The Case Studies in orange were from use.

# What about other situations.....

Issue	Case Study					
	1	2	3	4	5	
Contamination Levels (µg/100cm²)	11.7 - 2€	0.04 - 1.6, 42	>10	7.3 – 8.3	0.07 - 20	
Health effects in home						
Respiratory	Υ		Y	Υ	Υ	
Sleep	Y	Y	Υ	Y	Υ	
Behavioural	Υ	Υ	Y	Y	Υ	
Skin	Y	Y	Y		Υ	
Eyes	Y			Y	Y	
Effects resolved when out of home	Y	Y	Y	Y	Y	

Are the guidelines adequately health protective?



This work is one of the reasons why Australia, not currently as advanced as New Zealand when it comes to exposing the hidden issue of meth in property, is maintaining its advice that levels should remain at  $0.5 \mu g/100 cm^2$  for meth residues, be they from use or manufacture.

#### 4.5 Meth residue levels associated with manufacture

On page 27 of the PMCSA Meth Report, the following statement is made:

"Levels >30 $\mu$ g/100cm² are considered by forensic experts to signify that manufacture is likely to have taken place"

The forensic experts in question are ESR. From this statement, it could easily be inferred that only when levels of meth residues exceed this level is manufacture likely to have taken place.

Through the NZ Standards development process, the Committee was provided with advice from ESR, that a level of  $30\mu g/100cm^2$ , was level beyond which it was deemed unlikely that manufacture had not occurred.

Worth noting, is that the levels identified in Dr. Wrights research in the property where manufacture had occurred, are within this limit. They confirm the reality of one of the challenges associated with managing meth residues. Specifically, the level of meth alone, is not the indicator as to whether or not manufacture has occurred.

This should be clarified.

#### 4.6 Evidence of Health Effects

Page 23 of the PMCSA Meth Report identifies that there is a lack of evidence associated with adverse health effects from not just third, but second- hand exposure. Given how increasingly widespread meth related behaviour is, there is considerable merit in plugging this gap in our understanding.

This will improve by doing more research. It will also improve by ensuring the reporting systems that are referenced in Section 5 of the PMCSA Meth Report are understood and being used. We have dealt with people who believe they have been affected by living in property where meth has been manufactured or used. An offer was made to the lead researcher to create a connection with people who felt they had been affected, two months prior to the issuance of the report.

A client we assisted tested her property after receiving advice form medical professionals to do so. This advice was provided by asthma nurses who had 'no science to back it up' but believed it was an issue. This was not the policy of the DHB and as such has never been formalised. But if this is the case, it is not surprising no 'evidence' exists.

This offer was declined.

#### 4.7 The absence of evidence is not evidence of absence

Page 29 of the PMCSA Meth Report rightly notes that "the absence of evidence is not evidence of absence".

If the recommendations of the PMCSA Meth Report are, as seems likely, to be accepted by Government, an opportunity exists to put these uncertainties to bed once and for all by ensuring that evidence is collected and assessed in a formalised scientific experiment.

# 5 Development of Standards in NZ

The PMCSA Meth Report makes reference to the development of Standards in NZ. The media reporting that has flowed from issuance of the PMCSA Meth report and associated commentary, is particularly scathing of the process and outcomes of the Standard. To the extent that the entire process is to be subject to an enquiry.

It seems likely that this reaction has been significantly influenced by the wording the PMCSA Meth Report chose to use when considering the Standard and gaps in the author's knowledge of this process, that resulted from this.

#### 5.1 Makeup of the Standards Committee

All parties were subject to background checking and disclosure of conflicts of interests. While the Standards Committee included people who deal with meth affected property on a daily basis, this is accepted practice when creating a Standard. Understanding the realities of what is practicable, can ensure the development of a workable Standard. This was substantially achieved.

It has been suggested by the likes of the NZ Drug Foundation that the Committee was inappropriately influenced by vested commercial interests. There is no evidence of this. The current Deputy Chairperson of the NZ Drug Foundation joined the Committee as a representative of the Ministry of Health. Other parties represented included Councils and local government, the Ministry for the Environment, Property Investors Groups, Real Estate Institute of NZ, Insurance interests, Property Management interests, ESR and people experienced in training.

#### 5.2 Levels in the Standard based on Risk Assessment and Health Effects

The biggest bone of contention, appears to be the difference between levels in the Standard and those in the PMCSA Meth Report.

The wording of section 4.3 on page 20 of the PMCSA Meth Report appears to have been selected to undermine confidence in the process.

The PMCSA Meth Report states

"The standard does not focus on risk assessment or health effects, but the selection of a clean-up level was informed by the 2016 ESR report".

While this may be a statement of fact, for those who are unaware of the work undertaken by ESR in preparing the 2016 report, this comment suggests, the Standards Committee paid no heed to risk assessments or health effects.

However, the 2016 ESR Report was all about risk assessment and health effects. As such, risk assessments and health effects as the Committee understood them on the back of advice received from the Ministry of Health, were very much considered when the Standard was put together.

#### 5.3 Making the Ministry of Health Recommendations Workable

For a Standard to be effective, it must be workable. The recommendations presented to the Standards Committee, presented significant challenges in order for them to become workable.

The ESR report was prepared on the basis that it was technically impossible, in the absence of specialist scientific opinion, held only by ESR in NZ, to tell the difference between contamination from use alone and contamination where manufacture was involved.

Had the advice by the NZ Ministry of Health on the back of a report they commissioned from ESR, been adopted in its entirety the Standard would have been unworkable and the Committee subject to massive criticism.

The advice supplied to the Standards Committee regarding levels was:

"The recommended levels identified in the report are:

- 0.5 µg/100cm2 for houses where the drug has been manufactured (unchanged)
- 1.5 µg/100cm2 for houses where the drug has only been used carpeted
- 2.0 μg/100cm2 for houses where the drug has only been used uncarpeted"

https://www.health.govt.nz/news-media/media-releases/recommendations-methamphetamine-contamination-clean

Where it is not possible to tell the difference between use and manufacture, the Precautionary Principle generally applies. If the ESR Report had been followed, this would have meant that the level of  $0.5 \mu g/100 cm^2$  would have continued to apply. While this may have been considered appropriate in Australia, hand the same approach been adopted by the Standard's Committee, the entire Standard's process would have derailed.

## 5.4 So why 1.5µg/100cm<sup>2</sup> for all types of meth residues

Meth is meth regardless of whether it comes from use or manufacture.

Page 26 of the PMCSA Meth Report notes that trends in meth manufacturing mean contamination from current production methods is less challenging than it was historically considered to be. This was discussed with the ESR scientists who wrote the report who confirmed that they were happy with a level of  $1.5 \mu g/100 cm^2$  for use or manufacture.

This level has been adopted as part of the recommendations in the PMCSA Meth Report where meth has been manufactured, suggesting they agree with the decision not to adopt the  $0.5\mu g/100cm^2$  that was part of the ESR recommendations. Yet once again the language contained in the PMCSA Meth Report suggests a somewhat cavalier approach to decision making on the part of the Standards Committee.

#### 5.5 Why the higher level in PMCSA Recommendations?

The PMCSA Meth Report appears to have arrived at its conclusions using the same data as ESR. Albeit a different health risk assessment calculator has been used (Page 21 of the PMCSA Meth Report) with a further adjustment that seems to be based around establishing a relationship between the levels being recommended for properties where meth has been manufactured rather than smoked (Page 21 of the PMCSA Meth Report).

The shift in attitudes toward meth residues in properties proposed in the PMCSA Meth report is globally unique.

Clarification of how this figure was derived would be useful.

# 6 Managing Risk

The PMCSA Meth Report was commissioned to consider the health effects associated with residual meth in residential properties. The report goes on to make recommendations to the public of New Zealand as to how the risk associated with properties where meth has been used and/or manufactured.

These recommendations show a lack of appreciation of the basis on which Meth Risk Management services are provided. They introduce risk to people who follow them. This risk is not qualified in the report.

They are also predicated by the assumptions that the likelihood of coming across a property with significant levels of meth residues is low. This assumption is not well supported (our commentary on pages 9 and 10 refers) and as such recommendations informed by these assumptions should be reviewed.

#### 6.1 Exposing the reality of meth risk in NZ

Page 26 of the PMCSA Meth Report includes the following statement:

"Nonetheless, the methamphetamine testing and decontamination industry has promoted the idea that all properties are potentially in danger from methamphetamine"

The intimation of this statement, is that to do this is inappropriate and carries much weight, given the office from which it comes. It fuels the media frenzy which has followed the release of the report. It is utterly refuted.

Our experience has shown us that literally any property in any suburb in any town can be affected by meth. It is not, as some MPs would like to suggest, limited to poor suburbs. We have dealt with:

- Owner occupied properties in high end Central Auckland suburbs where meth was being manufactured by adult children
- High value properties in West Auckland where the same thing happened
- Apartments in the city which has had to be gutted due to lab activity
- Deceased estate in East Auckland, where family members manufactured meth
- Farms in the Waikato which foreclosed because family members became involved with meth
- Other farms where stock losses were underpinned by the need to fuel a meth habit
- Rental properties around the country, where manufacture has been a reality

The impact on the people involved is devastating, both financially and emotionally and for some it has impacted on their health.

How should those people who follow the PMCSA Meth Report recommendations be compensated for losses they incur as a result of following these recommendations?

#### 6.2 How do you tell what meth related behaviour has taken place at a property?

A major problem for all people is being able to tell that meth related behaviour has occurred simply by looking at it. You cannot do so by looking at it.

The photo below is from a property with 100 times the proposed level for contamination from use alone. It was picked up by a screening test. A property like this could easily be bought by an unsuspecting purchase, unless they undertook a test.



#### 6.3 Meth Risk Management is about more than just health

On pages 28 and 29, the PMCSA Meth Report makes specific recommendations as to how meth risk in property should be done. Following these recommendations, removes the ability of landlords to effectively manage the risk of meth related behaviour. The report acknowledges that these exist, albeit they are reduced where behaviour is limited to use.

Nevertheless, the PMCSA Meth Report reaches the conclusion that testing for meth residues is not warranted. This conclusion ignores the reality for landlords in New Zealand that methamphetamine is a clear, present and ongoing danger.

In the absence of an in-going meth test, situations can arise, where the tenant who receives compensation for being in a home where levels exceed recommended limits, is the very one responsible for the contamination event. This is incompatible with an approach to risk management that sees harm reduced.

If the realities of meth related behaviour are brought into consideration, the likelihood of loss clearly increases beyond that considered by the report's authors:

- 2011 IDMS study showed 32% of long-term users had a go at manufacturing meth in 2011 –
  in the absence of a meth management programme including lab backed testing, how will a
  property owner deter these people from renting?
- Meth labs are mobile. Meth users secure drugs by allowing mobile meth labs to set up in 'their' home – in the absence of a meth management programme including lab backed testing, how will a property owner deter these people from renting?
- Violence and unpredictable behaviour are a feature of meth users. This can compromise
  people and all too often results in damage to property in the absence of a meth
  management programme including lab backed testing, how will a property owner deter
  these people from renting?
- Meth users often have dubious connections, especially around purchasing their fix in the absence of a meth management programme including lab backed testing, how will a property owner deter these people from renting?
- Every day, a meth user has to choose whether to feed the meth pipe, feed the kids, feed the electricity meter or pay the rent. All too often, the pipe wins, which is one of the reasons why poor people with meth habits are further impoverished —— in the absence of a meth

management programme including lab backed testing, how will a property owner deter these people from renting and mitigating the risk of financial loss and ruin.

#### 6.4 Recommendations hamstring property owners?

The approach recommended by the PMCSA Meth Report, removes the ability to identify meth related behaviour unless it is extreme. This would hide the evidence of meth related behaviour, but do nothing to create an opportunity or incentive for that meth related behaviour to be modified.

If there is no ability to identify meth related behaviour, unless it is extreme, then there is no ability to hold people accountable. And if there is no ability to hold people accountable, then there are no impediments to meth related behaviour taking place.

Adopting an approach to property management that allows illegal, meth related behaviour to go on unchecked, brings with it profound risks.

Following the report's unqualified recommendations, would see a landlord at increased risk of breaching their obligations under the RTA, as they would only know they are in breach once they have exceeded. Breaching this obligation can bring with it fines and penalties under the RTA.

In addition, by following these recommendations, property owners are more likely to be:

- exposed to the unpredictable and often violent behaviour of meth users,
- at increased risk of damage to the property,
- at increased risk of suffering financial loss when the habit is paid for ahead of the rent
- at increased risk of being one of the properties the report does identify as being of concern, as meth users manufacture and allow 'their' homes to be used as the base for manufacture of meth

#### 6.5 Commentary on approaches to sampling misleading

The commentary on pages 28 and 29, and the recommendations that are made to use instant answer kits completely ignore the many significant benefits associated with lab backed testing.

The report recommends that instant answer kits calibrated to trigger when residues equivalent to the proposed level are used. Having seen reports where people using Instant Answer kits calibrated to  $1.5\mu g$ , have missed levels greater than  $12\mu g/100 cm^2$ , to see this advice in a report of this nature is alarming.

Instant answer kits are known to produce false positives for the presence of methamphetamine, where lab backed testing does not.

Lab backed testing, provides an indication, relative to guideline figures as to the level and therefore significance of meth residues. This cannot be achieved using infield instant answer kits.

The concern raised on Page 28 of the PMCSA Meth Report that expensive testing, subsequently shown to be unnecessary is not supported by the evidence. It can happen that a person pays for additional testing that proves to be unnecessary. However, the likelihood of this occurring is very low.

An example of contradictory advice, is the suggestion the PMCSA Meth Report makes when it comes to using lower sensitivity instant answer kits. These would be used by the landlord wishing to avoid breeching the RTA. But, if these were to be used, then positive results would be returned within the limits recommended by the PMCSA Meth Report. However, the positive result would give no sense as to how close to whatever limit is set, the levels that produced the positive result are. This would

then result in the more expensive testing being undertaken, when it is not required. The very criticism of the lab backed field composite approach.

#### 6.6 When meth contamination is deliberately/inadvertently hidden

Prior to the advent of lab backed meth testing, it was easy for meth residues to be hidden by repainting and redecoration. All too often, the limited number of instant answer kits that were being used, showed negative/non-positive results. The presumption was that there were no problems and people were exposed to risk.

Unscrupulous property owners or those who were fearful of the loses that could be associated with complying to the standard of the day, have painted properties in a deliberate attempt to mask the problem. The approach to sampling proposed in the PMCSA Meth Report, would see instant answer kits used that are 10 times less sensitive than most of those currently sold in NZ. If the PMCSA strategy is adopted, it should be considered likely that masking significant issues would increase.

## 6.7 Inappropriate targeting of providers of meth testing services

The PMCSA Meth Report recommendations are a direct attack on an industry that provides a high value low cost service to New Zealanders. There will always be instances where people are dissatisfied. Often this can be because family members were the ones responsible for the meth contamination. In other instances, it is due to owners redecorating before the cleaning is done, increasing uncertainty and sometimes cost. In other instances, it can be down to different interpretations of the Standard.

However, the vast majority of people who make use of the service have a positive and affirming experience, that confirms they will not be adversely affected by NZs growing issues with meth.

And some people, perhaps our most important customers, avoid losing tens of thousands of dollars on property purchases that are seriously compromised by meth. While others, owners of MethAffected property, avoid putting tenants into a position where they have the potential to have their health and wellbeing compromised.

This sorry state of affairs has occurred in the past. And will occur more often in the future, if the recommendations included in the PMCSA Meth Report regarding testing are followed.

#### 6.8 Trade-off of risk

Pages 29 and 30 of the PMCSA Meth Report include the following statement:

"Trade-offs need to be considered, particularly within social housing, where the risk of being in an unstable housing situation is likely to be far greater than the risk of exposure to low levels of methamphetamine residues."

If the residues are historic and occupants of the property are not engaging directly in meth related behaviour, then the exposure is limited to third hand meth residues. If the educated assumptions contained in the PMCSA Meth Report are correct, no-one would argue.

However, if the residues are current and ongoing, they are evidence of illegal meth related behaviour. This produces a health risk from the perspective of first and second-hand smoke, plus the increased risks associated with the behaviours meth users often exhibit. How much better would it be in terms of health outcomes, if that ongoing meth related behaviour was identified and then targeted with specific interventions that supported those people in changing their habits and behaviours?

At the time the PMCSA Meth Report is being issued, the Government is conducting a roadshow where one of the key points of focus is addiction, the PMCSA Meth Report is recommending actions that enable users of meth to continue their behaviours in a largely unchecked and unchallenged manner. A more cohesive Government, would see the opportunity to integrate policy and achieve better outcomes for the communities where meth is a day to day reality.

# 7 A Scientific way forward

In rolling out this report, the Government has emphasises its commitment to science. Government has also stated its commitment to rolling out the recommendations in the PMCSA Meth Report.

In light of this, consideration should be given as to move forward in a scientific manner, that reflects the commercial realities highlighted by the cries for compensations from those who feel they have been adversely affected by people working to the standards of the day.

#### 7.1 Filling the Research Gap

Something the PMCSA Meth Report has identified, is that there is a lack of real world research around the subject of third hand methamphetamine residues.

The PMCSA Meth Report, the willingness of the Government to embrace its findings and the debate it has created should be seen as a great opportunity to put the issue of third hand meth residues to bed once and for all on a global scale.

The recommendation in the PMCSA Meth Report regarding health risk, can be used as the basis for a hypothesis around what levels of meth accumulated from use alone create what health effects. Adopting a scientific way forward, would see this hypothesis tested.

With the confidence there is in the findings and the recognition that there is so little research, we have an excellent opportunity to fill this knowledge gap with real live data. The costs associated with completing this research would be modest when set alongside the value it would deliver.

#### 7.2 Accounting for variable

Variables such as mould, lead, asbestos, factors identified as potential adverse health outcomes anecdotal reports have attributed to meth and meth habits, will need to be accounted for. This may present challenges when setting up controls

However, by ensuring evidence and data is collected, recorded, measured and tested, the definitive study into the impacts of low levels of meth contamination will have been completed.

If the Government is not confident in the PMCSA Meth Report findings, it may choose not to make the relatively modest investment required. In doing so, we would see yet another opportunity to create certainty missed.

#### 7.3 Benefits of continuing the scientific approach

Formally completing the scientific experiment we seem set to embark on, presents a globally unique opportunity to fill the information gap that the PMCSA Meth Report identified.

If the hypothesis is proven, it will provide real world evidence that can be used by jurisdictions around the world to lift levels for properties where meth residues have arisen from use alone. They will do so, being confident that they will not be compromising health and wellbeing as a result. This will see hundreds of millions of dollars saved around the world each year.

#### 7.4 Funding for Research

We know that cash is tight, even though the proposed approach will see millions of dollars available to be spent on other more productive things, than decontamination of meth residues. Taking this into consideration, an option for funding for the research could be to apply for a grant from the Proceeds of Crime fund. This fund, has tens of millions of dollars in it and is significantly contributed to by seizures from meth criminals.

Using money derived from selling the drug that is the root cause of the problem, would see some good come out of any otherwise sorry situation.

#### 7.5 Putting savings to good use

As previously noted, the Mental Health and Addiction Enquiry has been running with submissions now closed. A key issue that will stimulate change and improvement in addiction services will be funding. With no cash provided for in the budget, the savings achieved by not having to repair public housing, while sufficient to pay for funding the research part of the scientific experiment, could be applied to practices that make a difference around meth:

- preventative education that focuses on good choices around things like meth,
- community support for people who are having to deal with the consequences of meth related behaviour, and
- proactive addiction treatment services.

In this way, money currently being spent on addressing a symptom of our meth problem, can be used to target the root cause of the problem, which is the decision people make to pick up the meth pipe.

#### 7.6 Provisioning for compensation

A significant furore around compensation off the back of the HNZ meth management policy and PMCSA Meth Report has arisen from people whose lives and investments have been compromised by adherence to the *de facto* standard of the day. Given this, it is recommended that thought should be given to how those who participate in the experiment will be compensated IF the hypothesis is found to be incorrect.

#### 8 Conclusion

New Zealand has lead the world in developing an approach to managing the various risks presented by meth use and manufacture. The parties involved with doing so have been criticised on the back of a report that needs further clarification before it can be considered complete.

There is clear desire on the part of many people in this country, to see the recommendations of this report implemented. Indeed, if the findings of the report regarding acceptable levels of meth residues are correct, this will be a great plus for not just New Zealand, but the world.

We must though recognise, that where the recommendations of the PMCSA Meth Report with respect to ongoing management of risk are concerned, we not only remove a powerful incentive for people to avoid meth in a house, we also remove that incentive from the community in which that house is located. This allows the people who make their livings from selling meth to operate with impunity.

Assuming that confidence in the findings of the PMCSA Meth Report remain high, it is to be hoped that the once in a lifetime opportunity to put scientific rigour around the experiment we will be conducting, which will inform science around the world, is not lost.

To not continue with the scientific approach the Government has adopted to considering the issue of meth affected property in New Zealand, would raise serious questions about their confidence in the advice they have been provided with and their commitment to serve the best interests of not just the people of New Zealand, but others around the world whose lives have the potential to be compromised by the use and manufacture of the Class A illegal drug methamphetamine.

# 9 Web Links

- 1 <a href="http://www.health.utah.gov/meth/Pages/DeconStandard.html">http://www.health.utah.gov/meth/Pages/DeconStandard.html</a>
- 2 https://www.ncbi.nlm.nih.gov/pubmed/24579754
- $\begin{tabular}{ll} 3 & $https://www.health.govt.nz/news-media/media-releases/recommendations-methamphetamine-contamination-clean \\ \end{tabular}$
- 4 https://theses.flinders.edu.au/view/39066a68-f6da-400e-9150-6d2f7a5ab899/1