

Advice to owners of premises where an illicit drug laboratory has operated

Background:

Illicit laboratory sites (drug labs or clan labs) are places where illegal drugs are manufactured. Rental properties are most commonly used, although commercial, industrial properties, remote rural properties and hotel and motel accommodation are also used. Information received from Queensland Police Service (QPS) suggests that approximately one drug lab is being discovered every day in Queensland. QPS has also advised that the manufacture of methylamphetamine accounts for 95% of all drug labs detected in Queensland.

Although QPS remove the dangerous chemicals, drug manufacturing apparatus and other visible remnants of drug manufacture from the sites, chemical contamination may remain in the property as many of the chemicals can be absorbed into the building structure and furnishings.

Possible health risks to future occupants

There is evidence that long term exposure to residual chemical contamination produced at clan labs during illegal drug manufacture can be a risk to human health.

During the drug manufacture, toxic gases and aerosols are produced. These are absorbed by floorings, walls, drains and ducting as well as furnishings or fixtures. After the chemicals and other apparatus are removed, residual chemical contamination remains. Contamination can remain in structures for a long time into the future.

Chemical contaminants that may be present in former clan labs are phosphine, iodine, hydrogen chloride, solvents, and the drug most commonly manufactured – methylamphetamine. Symptoms of exposure can include throat irritation, respiratory difficulties, headaches, skin conditions and mental health problems. It is important to note that adverse health effects are mainly related to long term rather than short term exposures.

The Commonwealth Department of Health has recently published an enHealth position statement that highlights the risks associated with drug lab sites to assist in their risk assessment. This is available on the enHealth website (see link below).

Options to ensure clean up

Property owners have a responsibility to ensure their property is safe for future occupants. Clean up of the property can be achieved in a number of ways.

An experienced cleaning company can be engaged under the direction of the homeowner or a professional can be engaged to manage the process. Suitable professionals include Occupational Hygienists and Environmental Scientists who can develop and oversee implementation of a remediation management plan.

If homeowners wish to clean affected properties themselves, the US EPA Voluntary Guidelines for Methamphetamine Laboratory Cleanup provide comprehensive information about suitable and effective clean up processes. While the US EPA guidelines do not recommend using bleach, recent research indicates that washing the surfaces three times: the first wash with detergent, the second wash with 10% bleach solution and the third wash with detergent is effective in removing chemical contaminants.

A homeowner will need to ensure the clean up has effectively removed the chemical contamination. Field test kits are available for methylamphetamine which will provide assistance to home owners in determining the extent of contamination in their premises and to help direct clean up activities. Testing of samples taken after the clean-up should be undertaken by an accredited laboratory to provide certification of the successful clean-up. The only accredited laboratory in Queensland is Queensland Health Forensic and Scientific Services. They have developed a kit for post remediation sampling and provide analysis services on a fee for service basis. See further information below regarding this service.

The Queensland Police Service may be able to provide additional information about the clan lab to assist homeowners in the remediation. Contact details are provided in their notification letter to affected homeowners or at <http://www.police.qld.gov.au/programs/druglabs/>.

Personal Protection

If safe practices are followed during clean up, any exposure to hazardous chemicals is likely to be very low. The property should always be well ventilated prior to and during clean up activities. Appropriate personal protective equipment should be worn. This could include disposable overalls (protection for arms, legs), suitable footwear, a respirator mask such as a P2 disposable mask and protective eyewear.

Regulators

Health risks from former illicit lab sites are regulated by local governments under the *Public Health Act 2005*, although other regulators may also be involved, for example where hazardous waste is involved. For further information regarding possible health risks from clan lab sites you can contact Health Protection Unit on 3328 9310.

Useful links

Australian Government *Clandestine Drug Laboratory Remediation Guidelines*

<http://www.ag.gov.au/CrimeAndCorruption/Drugs/Documents/Clandestinedruglaboratoryremediationguidelines.pdf>

Australian Government *EnHealth Position Statement; Clandestine Drug Laboratories and Public Health Risks*

[http://www.health.gov.au/internet/main/publishing.nsf/Content/A12B57E41EC9F326CA257BF0001F9E7D/\\$File/Clan-Labs.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/A12B57E41EC9F326CA257BF0001F9E7D/$File/Clan-Labs.pdf)

US Environmental Protection Agency *Voluntary Guidelines for Methamphetamine Laboratory Cleanup*

http://www2.epa.gov/sites/production/files/documents/meth_lab_guidelines.pdf

QH Forensic and Scientific Services (QHFSS) Remediation Sampling Information

The Clandestine Laboratory Group at QHFSS is able to analyse swab samples taken at former illicit drug laboratories and test for the presence of methylamphetamine.

QHFSS is able to provide sampling kits containing swabs, templates, sample vials, disposable gloves and full instructions, with the samples being returned to the laboratory for analysis.

Since clandestine drug laboratories can vary widely, advice should be sought as to the number of samples and the type of area to be sampled when a request is made for the test kits from QHFSS. The current Commonwealth Government Guidelines* recommend that a minimum of five samples are taken.

Please contact QHFSS for further information about sampling costs, to obtain the sampling kits and for advice on sampling:

Scientific Services Liaison Unit on (07) 3274 9000 or forensics@health.qld.gov.au

* *Clandestine Drug Laboratory Remediation Guidelines, Commonwealth of Australia.*

Approved by Director-General QH 30/06/2012

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