



Government of **Western Australia**
Department of **Health**

Notification and risk management after detection of a clandestine drug laboratory



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Purpose

These Guidelines outline how a relevant Local Government (LG) or other agency will be notified (**Notification Pathway**) by the Western Australia Police Force (WA Police) of a clandestine drug laboratory (clan lab) and provide procedures (**Assessment and Management**) to address any associated public health and/or environmental risks.

The Assessment and Management section are also relevant to other stakeholders, such as site owners, managers and occupiers, as well as service providers.

They are not intended for occupational settings, but it is worth noting that: clan labs can be found in workplaces or land/water areas associated with them, and that a clan lab site may be a workplace during any required professional assessment, remediation and validation.

People

Local Government (LG) – Engages with owner and approves the dwelling's remediation

Applicable sections:

- Initiation, Assessment and Management
- Attachment 5.

Owner – Arranges remediation and validation

- Initiation, Assessment and Management
- Figure 1

Forensic Contractor – Plans and conducts assessment, remediation and validation

- Initiation, Assessment and Management
- Figure 1
- Attachments 3, 4, and 5.

IF IN DOUBT CONTACT WA HEALTH ON 9222 2000 OR clanlabs@health.wa.gov.au

FOR THE LATEST INFORMATION ON CLAN LAB REMEDIATION IN WESTERN AUSTRALIA AND SUPPORTING DOCUMENTATION AND TRAINING MATERIAL GO TO ww2.health.wa.gov.au/Articles/A_E/Clandestine-drug-labs

Scope

These Guidelines address contamination resulting from illegal drug laboratory activity, that is, the manufacture of these drugs. It is also applicable when illicit drugs are processed, such as when dimethyl tryptamine is solvent extracted from vegetative materials.

When the origin of suspected illicit drug contamination is not known, then the sections related to contamination assessment and management may still apply, based on expert assessment. However, more usually any contamination would be the result of smoking drugs and therefore should be managed according to information provided on the following [Department of Health \(WA Health\) webpage](#).

Cannabis grow houses are not covered by these Guidelines, but management advice is available from [here](#).

Context

This document updates the original which was released by WA Health and the Department of Water Environmental Regulation (DWER) in 2014. DWER has a regulatory role where contamination of the environment occurs, and WA Health with LG have responsibilities for dwellings under the *Health (Miscellaneous Provisions) Act 1911* (see Attachment 2).

Clan lab detections reached a peak in WA in 2010-2011 but have declined to about 20 per year over the following decade. Although bulk materials and equipment are removed during routine police activities, potentially toxic residues may remain in or around the clan lab site, commonly in a domestic residence including on surfaces and furnishings. Residues can consist of: drug products such as methylamphetamine, other chemicals, raw materials and wastes. These residues and their associated risks can persist in affected areas for long periods, as demonstrated in [enHealth Guidance on: Clandestine Drug Laboratories and Public Health Risks](#).

The potential for contamination should be notified, assessed and managed to prevent possible risks to existing and future occupants, especially children, and the environment.

Notification pathway

WA Police notifies all clan labs it finds to the WA Health's Environmental Health Directorate which then provides this information and interpretation advice to the LG Principal Environmental Health Officer (EHO) or other responsible agency. This is done by email. If there is uncertainty whether a property is public housing, the notification may initially go to the LG.

A standardised form titled the 'Clan Lab Notification Information Checklist' ensures that important initial information is conveyed, including location and contact details, and the type of clan lab i.e. Tier 1 or 2. How the Tier type is determined, and the risks associated with each are detailed in Attachment 1. This information is provided by WA Police together with ChemCentre which attends all clan labs for safety and forensic purposes.

Although all clan labs will be notified to the responsible agency, sometimes other relevant agencies will also be advised for their information.

WA Police routinely leaves a warning sign at a potentially contaminated dwelling indicating that a clan lab had been present and there may be health risks from entering that property.

Initiation, assessment and management

After receiving a clan lab notification, the responsible agency should to identify whether any action is required, and if so then implement it. This process is outlined in Figure 1 and described in detail in subsequent sections of these Guidelines.

Action is normally only justified if recommended by WA Health in conjunction with the information package. In such cases, the package will include a Non-Evidentiary Site Report (NESR) prepared by ChemCentre. WA Health will also advise if regulatory action is not appropriate and will pass on the notification form for information purposes.

An NESR is provided when contamination is known or suspected and includes more detailed contamination-related information such as the type of process, chemicals involved, likely areas of contamination, and locations for sampling. NESRs are not normally provided for bush or vacant land sites, and any further action is at the discretion of DWER for these sites.

The assessment and approach to management will depend on information made available through: the notification process; the NESR; the advice in these Guidelines; and sometimes

other sources as specified. As will be discussed later, a Tier 2 clan lab will more commonly, but not always, require further action as the risks may be higher or more uncertain than for a Tier 1.

There are two distinct areas of possible contamination which may require remediation: contamination of the dwelling or contamination of the external environment, as outlined below. Sometimes both may be contaminated. The dwelling should be considered to also include other site buildings and external hard cover surfaces. External 'environment' usually means site soil, groundwater or surface water pursuant to the definition of 'environment' under the *Environment Protection Act 1986*.

Remediation goals or acceptable residue levels of the different chemical/exposure situations discussed below are drawn from the Australian [Clandestine Drug Laboratory Remediation Guidelines](#) (the National Guidelines).

Investigation Levels (ILs) for Health and for the Environment *may* also be used for remediation/validation purposes, the 0.5 µg/100cm² Health Investigation Level (HIL) for methylamphetamine on residential surfaces.

Exceedance of these ILs does not necessarily mean a risk exists but indicates the need for further investigation, health risk assessment or action. Remediation to meet these goals may be necessary or meeting other acceptable levels that are based on site-specific risk circumstances. The ILs are conservative and protective and are primarily for a forensic testing officer or contractor to apply. **WA Health can provide further advice on their application as required.**

Figure 1 Clan lab assessment, remediation and reporting process for a dwelling

Notification

Clan Lab Notification Received by Responsible Agency (Tier 1 or Tier 2)

Action Initiation

Does WA Health recommend remediation or other action?

Yes

No

Has NESR been received?

File Notification; No Remediation triggered

No

Yes

After 3 days if necessary request from WA Health or directly from ChemCentre

- Agency rings owner/agent
- Agency site visit if safe to do so
- Written clean-up direction to owner

Seek WA Health &/or legal advice if non-compliance by owner

Site Assessment and Management

Owner arranges assessment, remediation & validation consistent with Guidelines

Process Finalisation and Reporting

Owner submits final report to Agency

Does report demonstrate site clean and work consistent with Guidelines?

Yes

No

- Write to owner indicating site habitable
- Notify WA Health with copy of report

Direct further work to address problem

Dwelling contamination

Health (Miscellaneous Provisions) Act and Regulations apply.

The process detailed below enables the LG EHO or other agency officers (where appropriate) to determine what management steps are necessary for Tier 1 and Tier 2 clan labs for the protection of public health. The owner will be directed to have the decontamination completed by professionals and to demonstrate its effectiveness. See specific dot points for Tier 1 and Tier 2 clan lab situations.

The objective is for the dwelling to be fit for human habitation. Attachment 2 outlines the regulatory provisions for LG to direct action to be taken. In principle, a dwelling or part of a dwelling may be rendered unfit for human habitation as a result of contamination inside the dwelling and/or near the site of manufacture, storage or disposal activities. If only part of a dwelling is to be declared unfit, the continued use of the remainder of the dwelling will depend on critical infrastructure remaining usable e.g. toilets, or ablution facilities. Contamination of kitchen areas is of considerable concern in relation to occupant exposure.

The nature of the direction given to the owner will be the decision of the relevant agency taking account of the site-specific perceived risks and the agency's general policy in this regard. It is worth noting that some of the people at risk have already voluntarily been in the residence during the more dangerous operational phase of the clan lab and that WA Police should have placed a warning sign outside the premises. Any chemical residues would typically present a medium to longer term exposure risk. Children present at the time of the clan lab discovery will normally be referred to the Department of Communities, responsible for child protection. Other risk groups include pregnant women, the elderly and the ill.

An unfit for human habitation notice under the *Health (Miscellaneous Provisions) Act 1911, S 135* may be served at any time. In the absence of any testing results at the reporting stage, a graduated approach can be used which may indicate intent to serve the *S 135* notice if action does not occur, or the cleanup notice may be immediately applied. Tier 2 clan labs are likely to require stronger and more formal direction of work. A regulatory notice may be more likely to trigger an insurance policy response, which aids to facilitate the remediation and management process. Examples of notice letters are provided in the *Resources* section of the WA Health clan lab webpage.

In some cases, it may be necessary for the responsible managing agency to consider commissioning the remediation work and then seeking remuneration (see process outlined in Attachment 2). Local Government may be able to do this under Section 181 and there is also possible repayment by the clan lab offender occurring under the *Sentencing Act 1995*.

If it is necessary to serve Section 135 notice, it is highly undesirable for people to remain in affected parts of the dwelling. If they do, the need for any consequential action should take account of the risk factors already identified and as necessary, advice from WA Health.

Although contamination is normally highest in operational clan lab areas, residues may spread elsewhere in a building through aerosolisation or tracking. So, residue management should also be considered in adjacent or other rooms particularly on horizontal surfaces where there is potential for extended exposure of children such as in bedrooms.

Any contamination will be confined to the dwelling or in some cases to the immediate vicinity of an associated external area or roof space. Any contamination concerns from neighbours can be addressed by advising that they are not at any risk.

If unknown environmental contamination becomes apparent during investigations or management then this should be reported to the DWER.

The recommended series of assessment and management steps are listed below, with useful additional examples of LG procedures to address them on the WA Health website, under Relevant Resources. In the case of Tier 1 clan labs, only some will have presumed contamination and thus have an NESR provided and need management. For Tier 2 clan labs, management will more often be necessary and important.

Tier 1 clan lab

For a Tier 1 clan lab (most common in WA), contamination when indicated (together with an NESR) will normally be both limited and of lower exposure risk. Therefore, a Tier 1 Clan Lab is can be managed through assessment and remediation procedures outlined in this document. Process steps are outlined below.

Site specific procedures may be possible based on advice, if sought, from WA Health.

1. For private properties, the LG EHO should contact the owner preferably by telephone. If LG has inadvertently been notified of a public housing property, it should be referred on to the Department of Communities for action, and WA Health advised.
2. The LG EHO or relevant regulator may wish to visit the site if safe to do so. However, the value of site familiarisation needs to be weighed against risks posed by any drug residues, hazards present and aggression from upset people involved. The investigating officer should take necessary general and chemical safety precautions. These should be based on NESR information and ChemCentre advice and take account of the entry and safety guidance as provided in Attachment 3. The WA Police contact should be able to advise on risks from persons at the site and arrange a site visit escort if appropriate including through local police.
3. The LG should write to the property owner with directions about necessary work with copies of the Notification, NESR and these Guidelines (or web address). The directions should include guidance for appointing a forensic tester, specifically one of those in the WA Health list of [Companies Qualified for Testing and Remediating Chemical Residues](#).
4. Sample letters are included in the Resources section of the [WA Health Clan Lab webpage](#).
5. The owner should engage the services of a WA Health listed forensic testing contractor and an industrial cleaner. In some cases, such as in remote areas, forensic contractors may not be available. After training by WA Health, it is possible that LG EHOs may undertake the testing associated with Tier 1 clan labs.
6. The forensic testing contractor should have copies of any written guidance to the owner, the Notification and NESR, and base the assessment and management process on these Guidelines.
7. The forensic testing contractor should develop and implement an assessment, remediation and validation plan, including safety guidance, based on Attachment 3, with the remediation being completed by the commercial cleaning contractor. Any post-remediation elevated validation test results (i.e. at or above the HIL of 0.5 µg/100cm² for a methylamphetamine swab sample in a dwelling) should necessitate additional rounds of professional cleaning of the particular area until test results are below the HIL. Validation testing must comply with the guidance as outlined under point 8 for Tier 2 clan labs.

8. The forensic testing contractor must provide a written report as per Attachment 5, acceptable to the regulator, stating the work undertaken, its effectiveness and its compliance with these Guidelines.
9. If the report is acceptable and no further work required, the regulator should write to the owner indicating this and that the dwelling is fit for human habitation. WA Health should be copied into this correspondence at clanlabs@health.wa.gov.au. The forensic testing contractor also needs to provide a copy of the final approved report to WA Health at the above email address.

Tier 2 clan lab

A Tier 2 clan lab should be given a **priority** when indicated as possibly or likely to be contaminated and an NESR is provided. Such laboratories will require specialised assessment, and if necessary management, due to possible greater risks and more extensive or complicated chemical processes involved.

Site-specific procedures may be possible based on advice, if sought, from WA Health.

1. For private properties, the LG EHO should contact the owner preferably by telephone. If LG has inadvertently been notified of a public housing property, it should be referred on to the Department of Communities for action, and WA Health advised.
2. The LG EHO or relevant regulator may wish to visit the site if safe to do so. However, the value of site familiarisation needs to be weighed against risks posed by any drug residues, hazards present and aggression from upset people involved. The investigating officer should take necessary general and chemical safety precautions, noting that a Tier 2 clan lab may be less predictable and riskier than a Tier 1. These precautions should be based on NESR information and ChemCentre advice, and take account of safety guidance in Attachment 4, and the entry guidance and safety checklist in Attachment 3. The WA Police contact can advise on risks from persons at the site and arrange a local police escort for a site visit if necessary. Screening sampling is possible for confirmatory or evidentiary purposes after consultation with WA Health.
3. The LG should write to the property owner with directions about necessary work with copies of the Notification, NESR and these Guidelines (or web address). The directions should include guidance for appointing a forensic tester, specifically one of those in the WA Health list of [Companies Qualified for Testing and Remediating Chemical Residues](#).
4. Sample letters are included in the Resources section of the [WA Health Clan Lab webpage](#).
5. The owner should engage the forensic testing contractor to plan and undertake forensic testing of the premises to identify areas requiring decontamination.
6. The testing should be based on the Notification, NESR, safe practices, a site visit, these Guidelines and where necessary detailed sampling guidance from the National Guidelines.
7. The forensic testing contractor should carry out the initial forensic testing to inform the remediation plan, Note that:
 - a. Immuno-assay swabbing is suitable as a screening method only (T2) and must have a stated level of sensitivity consistent with the prescribed Health Investigation Level for methylamphetamine of 0.5 µg/100cm² (in a dwelling).

- b. Where a positive detection is obtained for an immune-assay swab, an analytical swab sample must be collected from an immediately adjacent area for quantitative analysis by an accredited laboratory as indicated below.
8. Any laboratory analysis for potential illicit drug swab samples must be undertaken by a National Association of Testing Authorities (NATA) laboratory accredited for this purpose and be on the WA Health list of Companies Qualified for Testing and Remediating Chemical Residues. The forensic testing contractor should arrange for this analysis.
9. The owner with advice from the forensic testing contractor should engage a suitable cleaning contractor. Tier 2 clan labs require more specialised remediation skills and a list of suitable cleaning contractors is included in the above link under point 8.
10. The forensic testing contractor should develop and implement a remediation and validation plan, incorporating safety requirements, based primarily on these and/or the National Guidelines. In the cases of fires or explosions, the areas to be remediated would consist only of those structures to be retained in the building that may be contaminated.
11. The remediation and validation should be undertaken. Note: Immuno-assay swabbing is not a suitable validation method for Tier 2 clan lab sites. Analytical swab samples must be collected for quantitative analysis by an accredited laboratory, using a systematic sampling approach across areas identified as impacted by initial testing.
12. Any elevated test results will necessitate additional rounds of professional cleaning of the particular area until acceptable results are obtained.
13. The forensic testing contractor must provide a written report as per Attachment 5, acceptable to the regulator, stating the work undertaken, its effectiveness and its compliance with these Guidelines and/or National Guidelines.
14. If the report is acceptable and no further work is required, the regulator should write to the owner indicating this and that the dwelling is fit for human habitation. WA Health should be copied into this correspondence at clanlabs@health.wa.gov.au. The forensic testing contractor also needs to provide a copy of the final approved report to WA Health at the above email address.

Note: Although every effort should be made to remediate the site, it is not possible to state that all areas within a residence are totally free of chemical residues associated with a clan lab. Analysis by swabbing high risk areas, even after remediation, may still indicate traces of chemical residues, but at levels that pose a negligible risk to human health (that is below the HILs).

External contamination

Environmental Protection Act 1986, Contaminated Sites Act 2003 and associated Regulations apply).

Chemicals and wastes from illicit drug manufacture are often dumped on the site (outside a building) or nearby. Chemicals and wastes may also be stored in unsealed areas of a site, potentially posing a risk to the environment and public. Where contamination outside a dwelling (i.e. contamination of the environment) is identified at a site, the notification process described in this document requires that DWER is advised. WA Police notification would not normally be followed by an NESR in cases of bush sites or vacant land.

Protection of the environment is normally managed by DWER, although LG or other regulators may have some involvement especially if: buildings on the site are also contaminated; it is LG

land; or they can facilitate a simple environmental remediation. Where practical other relevant regulators should be kept informed. In some cases, contractors employed to address dwelling contamination can also undertake remediation of limited environmental contamination as part of the same decontamination plan.

Evidence of wastes being dumped may include, but is not be limited to:

- white/caustic residues on the soil
- oil type staining on the soil
- pits with evidence of chemical wastes being deposited
- areas of dead grass/vegetation or disturbed earth
- discarded gas cylinders or chemical containers
- batteries or remains of batteries.

The recommended assessment and management steps for contamination of the environment are listed below:

1. DWER will contact the owner by telephone, or in writing as appropriate.
2. Depending on the level of risk posed, DWER may visit the site, taking safety precautions especially for Tier 2 clan labs based on information contained in any NESR or ChemCentre advice, and taking account of safety guidance in Attachment 3.
3. DWER will liaise with the LG EHO and determine if an Environmental Field Notice should be necessary, or whether another course of action be taken such as the site's statutory reporting under the *Contaminated Sites Act 2003* (DWER Form 1 report).
4. DWER will provide the owner with advice and directions about necessary work and enclose copies of the non-evidentiary report and of these Guidelines. In some cases DWER may only provide remediation and disposal directions for the work but if necessary the following process may apply.
 - a. The owner should engage a suitable environmental contractor, in particular one listed by [Australian Contaminated Land Consultants Association](#). For limited contamination a forensic tester may be adequate.
 - b. Environmental contractor should develop an investigation and remediation plan taking account of available information and guidance including the NESR, these Guidelines, the National Guidelines and if necessary the DWER 'Contaminated Sites Management Series' (CSMS) of guidelines. Note that:
 - i. Limited ammonium sulfate/caustic waste can be treated on-site by intensive irrigation to dilute the residue.
 - ii. Large quantities of ammonium sulfate/caustic waste should be excavated with a limited quantity of soil beneath the material to be scraped.
 - iii. All other waste or residues should be excavated and disposed to a suitable landfill facility in accordance with DWER's *Landfill Waste Classification and Waste Definitions 1996* guidelines (as amended 2019).
 - c. Where extensive contamination is found to be present the remediation should be conducted to ensure residue(s) are below levels outlined in the National Guidelines.

- d. The environmental contractor will carry out validation testing for any remediation and provide a report to DWER in accordance with the CSMS of guidelines. Note that:
- i. Validation of ammonium sulfate/caustic waste impacted areas may be by disposable pH soil strips, which should be photographed (along with excavation activities) and provided in the validation report.
 - ii. All other waste including hydrocarbon waste which may be impacting the site should be excavated and/or bagged and disposed of at a suitable landfill, based on DWER's *Landfill Waste Classification and Waste Definitions 1996*.
 - iii. Validation of other waste impacted areas should include analytical testing of soil samples by a NATA accredited laboratory for, TPH, BTEX and PAH.
- e. The environmental contractor will complete an "Investigation, Remediation and Validation report" in accordance with the DWER CSMS guidelines for the works (or Attachment 5), and with reference to the National Guidelines, and email this report to DWER [Contaminated Sites](#).
- f. If the report is acceptable and no further work is required DWER will write to the owner indicating this and **provides a copy to WA Health at clanlabs@health.wa.gov.au**.

Agency contact details

The main contact details for key agencies and the services they provide are listed below.

ChemCentre

When making enquiries about obtaining testing services or when providing advice to an owner or agent, ChemCentre should be contacted via email.

Illicit Drugs Section

clanlabremediation@chemcentre.wa.gov.au

9422 9800

Department of Communities

Duty Officer

9222 2575 or 9222 4712 or during office hours

Department of Health

All notifications, reports and requests should be sent by email.

Environmental Health Directorate

clanlabs@health.wa.gov.au

9222 2000 during office hours.

Department of Water and Environmental Regulation

In the first instance contact should be made with the Pollution Response Unit, and as necessary the Contaminated Sites Branch may become involved.

Pollution Response

1300 784 782 (24-hours)

<https://www.dwer.wa.gov.au/your-environment/reporting-pollution>

pollutionwatch@dwer.wa.gov.au

Contaminated Sites

1300 762 982 (during office hours only)

contaminatedsites@dwer.wa.gov.au

Western Australia Police – Serious and Organised Crime Division

Drug and Firearm Squad

08 9223 3134

131 444 (after hours)

Drug.&.Firearm.Squad@police.wa.gov.au

Resources and references

Department of Health Clan Lab webpage:

https://ww2.health.wa.gov.au/Articles/A_E/Clandestine-drug-labs

enHealth Guidance on: Clandestine Drug Laboratories and Public Health Risks January 2017

[https://www.health.gov.au/internet/main/publishing.nsf/Content/A12B57E41EC9F326CA257BF0001F9E7D/\\$File/Guidance-Clandestine-Drug-Laboratories-Public-Health.pdf](https://www.health.gov.au/internet/main/publishing.nsf/Content/A12B57E41EC9F326CA257BF0001F9E7D/$File/Guidance-Clandestine-Drug-Laboratories-Public-Health.pdf)

Australian Contaminated Land Consultants Association: <https://aclca.org.au/wa-our-members>

Report of a Known or Suspected Contaminated Site (Form 1) under Section 11 of the *Contaminated Sites Act 2003*: <https://www.der.wa.gov.au/your-environment/contaminated-sites/57-forms>

U.S. Environmental Protection Agency, *Voluntary Guidelines for Methamphetamine Laboratory Clean-up – March 2013*

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

Australian Criminal Intelligence Commission Illicit Drug Data Reports

<https://www.acic.gov.au/publications/reports/illicit-drug-data-report-2017-18>

Attachment one: Clan lab characterisation methodology

For each clan lab, WA Police and ChemCentre forensic officers conduct an initial assessment of the site. Based on the findings, the ChemCentre will provide input to the Clan Lab Notification Information Checklist and if contamination is possibly or likely to be present in or associated with a dwelling complete a “Non-evidentiary site report” (NESR). The NESR will include information relevant to human health and environmental contamination issues. This information will be used to assist in determining the type of clan lab and to further inform the notification and management processes.

For the purpose of this guidance note, clan lab types are:

- Tier 1 (simple and low quantity process, generally low to medium risk)
- Tier 2 (special and/or possibly high quantity process, uncertain and potentially high risk).

In WA the most common clan lab produces methylamphetamine using the Birch (anhydrous ammonia) reaction method in small quantities, often for an individual or small group consumption purposes. This Tier 1 process normally results in limited, low level and easily managed contamination, with low or possibly up to medium associated health risks as a result of residues.

However, larger scale processes or ones that use other chemical reactions (Tier 2) can result in greater contamination and higher or less predictable risk that may require more careful management and professional assistance.

The primary questions that the ChemCentre will address to determine the tier level of the clan lab consist of:

Are there indications that the manufacture method is not a Birch reduction?

Is the estimated production cycle capacity greater than 5.0 grams?

Is there more than 100 L/kg of stored (labelled) chemicals?

Is there more than 50 L/kg of stored waste?

Is there any evidence of significant staining or other surface contamination within the dwelling?

Is there any evidence to suggest long term manufacture at the site?

Has there been a fire or explosion at the property?

If the answer to any of these questions is yes or there is any uncertainty (default position) then the clan lab will be classified as Tier 2. The management of Tier 1 and Tier 2 is only necessary where indicated in the notification and will also be assisted by additional information in the NESR including in relation to the nature, quantities and locations of chemicals removed or observed.

Attachment two: legislation supporting local government clan lab remediation

The current legislation, during the transition period to the *Public Health Act 2016*, is entitled the *Health (Miscellaneous Provisions) Act 1911*. For simplicity, it is referred to here as the Act. Penalties for failure to take actions following receipt of a Notice may be increased.

Environmental Health Officers (EHOs) have specific roles and legal powers available for inspecting dwellings or land to obtain evidence for a statutory purpose or in an evidentiary capacity.

EHOs have powers of entry onto any land or premises to determine if there has been a breach of the Act. (S 26 and 349)

Part V – Dwellings

Division 1 – Houses unfit for occupation

S 135. Dwellings unfit for human habitation

Where any part of a house or building is deemed unfit for human habitation, i.e. where illegal drugs have been manufactured, then an unfit for habitation notice may be issued by an EHO on behalf of the LG, to the owner or occupier.

A notice may be issued where there is evidence of, or an EHO has reasonable belief that hazardous chemicals have been used in the manufacture of illegal drugs, and where there is a likelihood of them impacting on human health of existing or future occupants.

There may also be visible evidence of hazardous chemicals and/or equipment used in the manufacture of drugs and their contents in or around the premises, or part of the premises. Under Consumer Protection legislation, if the buyer or tenant of a property becomes ill from exposure to a known former clan lab and it was not disclosed as a material fact, the owner and real estate agency could be subject to legal action.

An inspection by an EHO may occur prior to the issuing of an Unfit for Habitation Notice (S 135) or repair notice S 182 (3), (4). This usually occurs after the WA Police and ChemCentre Officers have left the premises removing visible remnants of illicit drugs, and/or, including Evidentiary Samples.

If the house is unoccupied or the occupants can safely remain until remediation, then serve a notice under S181. If the house is unfit, direct the occupants to leave under S 135, until remediation occurs, enabling the house to be reoccupied after the LG is satisfied with its effectiveness and the notice removed.

The inspection can be undertaken by a range of authorized or competent officers. Competent officers include EHOs, or persons holding formal qualifications in forensic science or occupational hygiene from a recognised tertiary institution.

The usual response is to issue a Notice declaring the premises or part of the premises unfit for human habitation (not able to be lived in), until a Schedule of Works to satisfy the contents of the Notice is completed. Schedules usually relate to amending or removing contaminants in a specified manner and time.

Attachment three: Tier 1 clan lab assessment and management

A Tier 1 clan lab normally will have a low level and restricted spread of contamination, especially if any production location is known. This should only require simple but adequate site survey, followed by remediation and validation work, often without the need for screening sampling. This work should be based on a written plan.

Contractors employed for clan lab site investigation, assessment, remediation and validation purposes should be selected from the WA Health list of [Companies Qualified for Testing and Remediating Chemical Residues](#).

Site survey

People undertaking a site survey may include officers of the responsible agency for familiarisation purposes and also accredited contractors associated with the remediation and validation who may need to be better informed in support of the work they will undertake.

Recommended steps associated with such a visit include:

- obtaining and becoming familiar with available information including the Notification form and NESR, and if possible a building site/floor plan
- undertaking an entry risk analysis and implementing precautionary actions, including ventilation (see Safety Analysis below)
- checking for and, if necessary, reinstalling the WA Police building contamination warning notice
- carrying out at least a cursory whole of premises inspection including yard and outbuildings
- reporting or taking appropriate action regarding any previously undetected hazards or suspicious areas
- inspecting suspect areas more closely, with a focus on potential high exposure areas such as kitchen, lounge room or rooms where young children may spend time
- interviewing owner or occupants, if appropriate and safe
- taking photographs and possibly limited swab samples, if trained and equipped to do so
- In the case of a responsible agency, providing any occupants with safety advice and brochures where available (advice may include to vacate the premises if not already done so, or to avoid entry into potentially contaminated areas)
- documenting the visit to assist the orchestration of the contamination management.

Assessment

For Tier 1 sites normally, the assessment that guides the remediation depends on the Notification and NESR documentation as well as the site survey. Sampling can be undertaken if the foregoing material is not considered adequate information. This may occur if there is uncertainty about the location of clan lab's operation or if significant contamination may have arisen from prolonged methylamphetamine use in the building, for example from drug smoking.

Uncertainty about lab location may be due to the lab being in storage rather than being erected at the time of discovery. This can be common with the Nazi/Birch equipment and its portability means that operation could occur over time in more than one place in a building.

The most likely locations for a lab tend to be in kitchens and laundries but other places can be used such as common living areas and bedrooms. The latter areas may also be ones where smoking of meth can occur, as well as toilets/bathrooms. It is worth noting that walls and ceilings may become contaminated as well as floors, counters, furniture and other items.

Remediation

The remediation should be undertaken by a professional cleaner identified from the published list of approved companies and is based on a plan developed by the forensic testing contractor. This plan should incorporate safety guidance as discussed above.

Areas most likely requiring remediation are those associated with the manufacture, storage and disposal of drug-related chemicals, when they can be identified.

Warm water and detergent (slightly alkaline detergent is recommended) or drug specific cleaning solutions should be used. Cleaning should extend to all floors and work surfaces in the affected rooms (including of items), and areas of walls immediately adjacent to any reaction or storage sites. Cleaning of ceilings close to a production area may also need to be considered because although human exposure to them is likely to be very low, remobilization of the contamination may be possible over time.

Whenever in doubt, such as due to uncertainty about lab location, a potential smoking space, or spread of contamination into adjoining areas, then remediation should occur more widely because of the additional assurance it will bring for little additional cost. If it is possible that contamination may have occurred in communal areas such as kitchens, or areas frequented by children then these should also be remediated.

Any ventilation ducting, particularly ducting located near a chemical reaction, such as a kitchen ceiling or range hood ducting should be thoroughly remediated, and any filters replaced. Although aerosol penetration is possible into passive ceiling air exchangers near the area of drug manufacture, the contamination is likely to be limited, localised and not readily accessible.

Soft furnishings, clothing, upholstery or carpets that may be affected should be laundered or remediated with a commercial method using shampoo or steam cleaning. They may need to be disposed of if higher levels of contamination are possible, especially potentially contaminated children's toys. Items for disposal should not be recycled.

For likely contaminated porous surfaces, their sealing or replacement may need to be considered.

Filters associated with air conditioners should be replaced and any sinks or drains that may contain chemical residues should be thoroughly flushed with warm water and detergent (slightly alkaline detergent is recommended).

In situations where surfaces may be porous or in a poor condition consideration should be given to replacement of these surfaces due to the risk of absorbed contamination.

Depending on the nature and extent of the potential contamination, site circumstances and future possible use, the forensic testing contractor may deem additional areas and types of remediation necessary.

Validation

Validation should be undertaken by the forensic testing contractor based on the plan.

Immuno-assay swabbing by a qualified person is suitable for validation of Tier 1 clan lab sites **only** and must have a stated level of sensitivity consistent with the prescribed minimum Health Investigation Level (HIL) for methylamphetamine of 0.5 µg/100cm² (in a dwelling). Methylamphetamine is used as an indicator of contamination only.

The locations of the swabs should be based on where the highest contamination may have occurred, considering higher potential future exposure scenarios, especially for children. At least 5 such swabs in total for different primary affected areas should be used for this purpose, adjacent to locations of any screening samples if this has occurred.

Consistent with the National Guidelines, a swab should also be collected from a horizontal surface in each bedroom within a dwelling, particularly any bedroom occupied by a child.

Any elevated test results for methylamphetamine (i.e. at or above 0.5 µg /100cm²) will warrant further remediation of that area until no further contamination is identified.

Refer to the National Guidelines for more detailed information if necessary on the validation process, specifically regarding other chemical contaminants. Note that where not otherwise indicated and where the guidance documents overlap, the WA Health Guidelines take precedence over the National Guidelines.

Personal protection and safety

Although Tier 1 clan labs (and many Tier 2) may have limited contamination, this and other possible hazards will have to be dealt with safely during site entry by responsible agency officers, e.g. during any pre-remediation inspection. This also applies to companies undertaking the remediation, although this will be a routine process that they are trained for.

Safety analysis

A pre-site entry safety analysis is recommended which can be based on the following steps: Information Collection; Hazard Identification and Rating; Management Measure Selection; and Final Review and Decision. These steps are outlined below and captured in the attached Annex in the form of a safety checklist to complete when considering site entry. The Resources section of the WA Health Clan Lab web page includes a DWER Job Safety Analysis package which can also be used for this purpose.

Information Collection – The primary sources of information about each clan lab site are the Notification Form and the NESR, including material directly or indirectly related to safety. If in doubt or for extra information the relevant WA Police or ChemCentre contacts can be approached for safety advice. Information based on contact with the owner may also be useful.

Hazard Identification and Rating – As well as chemical residues (including gases), other hazards may be present on site including: other non-clan lab related bulk chemicals or petroleum products; occupants associated with the lab; physical dangers such as from damaged or deteriorated structures; electrical problems possibly related to clan lab improvisation arrangements; and biological hazards such as arising from unhygienic behaviour or animals.

Of relevance are the Accessibility boxes in the Notification Form which provide advice on the need for personal protective equipment (PPE) and whether there are accessibility issues “due to danger or security restrictions”. Useful NESR information includes whether all chemicals and equipment have been removed and locations of the clan lab-related operational areas. Based on

experience and confirmed by data: PPE is normally not called for; security is rarely a concern; and clan lab-related materials nearly always have been removed.

Management Measure Selection – The preferred measures for these types of situation are procedural controls with the necessary PPE. Procedural controls can include one or more of the following if the associated hazard happens to be present:

- being accompanied by a WA Police representative if there is a person-related risk, arranged through the WA Police specific site contact officer or the Organised Crime Squad on 9223 3558
- being accompanied by the owner (if not the operator) or their agent
- implementation of a movement plan designed to minimise exposure time, reduce contact with surfaces and avoid other incidental hazards
- ensuring there is good ventilation to the site building/structure.

Good ventilation is recommended for entry into a clan lab building especially if it has been operating recently, closed-up, and in warm weather when any volatile materials are more likely to become airborne. This can include opening doors and windows and the use of mechanical ventilation as long it is unlikely to mobilise contaminant dusts. It may be worthwhile to wait 10 minutes or so after opening-up before the inspection takes place.

In the case of PPE, although it may not be called for it should be at least be available for use at the site, and its use be the default position if there is any doubt about chemical hazards.

Final Review and Decision - Information is to identify and rate the hazards and the management measures employed so that on entry, officer-risk is deemed low, then the inspection may proceed. It may be worth giving a basic outline of the assessment process and final decision in any documentation associated with the visit. If in doubt seek advice from managers or other agencies with site knowledge or clan lab site expertise.

Personal protective equipment and clothing

When used, as a minimum PPE should consist of a disposable Class P2 respirator, disposable overalls, eye protection, disposable Nitrile gloves, and steel cap chemical resistant footwear (possibly with overshoes). On exit from any clan lab, all gloves, overalls and other disposable PPE items should be placed in a hazardous waste bag and disposed to a suitable waste bin.

In hot conditions the wearing of disposable overalls, mask and gloves potentially poses a risk of dehydration and heat stroke. It is recommended that in temperatures above 26°C individuals not remain in the premises for more than 20 minutes without rest, and they are monitored, and hydration is maintained.

CLAN LAB SITE ENTRY – SAFETY ANALYSIS CHECKLIST

Note that a site inspection may not be necessary even when safe to do so.

Information Compilation (tick)

- Notification Form
 NESR
 WA Police Advice
 ChemCentre Advice
 Owner Advice
 Other? Describe:.....

Is it adequate? Yes No Maybe If answer is no or maybe then additional information should be sought, or a more cautionary approach taken to any site entry.

Hazard Identification and Rating - Presence of the following hazards (tick/comment):

Hazard	Likely	Unlikely	Unknown	Comment
Clan lab residues/gases				
Other dangerous chemical				
Occupants				
Physical/electrical/biological				
Other:				
Other:				

Management Measure Selection - Use of the following management measures (tick/comment):

Measure	Yes	No/NA	Unknown	Comment
Ventilation				
Owner escort				
WA Police escort				
Movement plan, including time/contact controls				
PPE				
Other:				
Other:				

If PPE is to be used please tick the relevant equipment:

- Respirator
 Gloves
 Safety Shoes
 Hard hat
 Eye protection
 Overalls
 Other (describe)

Final Review and Decision

Based on the information available, hazards identified, and management measures planned is the site safe to visit?

- Yes Proceed with inspection but review process as necessary
 No Seek advice from line manager and/or expert external agencies

Name:.....Signature:.....Date:.....

Attachment four: Tier 2 clan lab assessment and management

Tier 2 clan labs are classified as such based on several criteria, relating to both potential higher risk and more complicated or uncertain processes, in comparison to Tier 1 sites (See Attachment 3). Although these are likely to be far fewer in number than Tier 1 clan labs (>80%), by their nature they require more rigorous and possibly more varied management. All work undertaken should be based on a written plan.

Contractors employed for clan lab site investigation, assessment, remediation and validation purposes should be selected from the WA Health list of [Companies Qualified for Testing and Remediating Chemical Residues](#).

Management mitigating factors

In applying the generic sampling, and any subsequent remediation and validation outlined in this Attachment, it is possible to tailor the actions to the particular site circumstances, including local factors that may mitigate the risk. Factors that may be considered as a justification for applying a less demanding program of activities include if:

- chemical reactions or processing activities have not occurred at the premises
- any production though deemed >5 g or for operations over a prolonged period are believed not to be greatly so
- the location of the clan lab activity, if known, is in an area that is not expected to have significant pronounced potential for human exposure, particularly of children
- a building is to be demolished then actions should more relate to safeguards during that activity and proper disposal
- a site has been affected by fire, it may be that at least for the burnt areas, the toxic residues will relate to the fire event itself rather than contamination due to the clan lab's operation
- a site will subject to an extensive and exacting remediation in any case, which may mean sampling for delineation and/or quantitation purposes is not necessary
- a methylamphetamine clan lab employed a Birch reduction method rather than a phosphorous-related reaction, then the potential contamination may be much lower, other things being equal
- a non-methylamphetamine method if used is such that aerosolisation and settling out of hazardous materials is not significant.

It should be noted that whenever there is any doubt about the character and degree of contamination a precautionary approach should be taken.

Assessment

In common with a Tier 1 clan lab, a site survey is recommended for a Tier 2 prior to the commencement of further assessment and management work. The Site Survey procedure outlined for Tier 1 labs in Attachment 3 should be used, although greater care would be appropriate for a Tier 2 site.

After visiting the site, a sampling plan should be developed. The sampling program applies primarily for Tier 2 sites given the uncertainty and possibly severity of contamination that may be associated with these types of clan labs. The sampling plan can be subsequently incorporated in final form into the site's management report.

The key guidance regarding the sampling program for Tier 2 sites are the National Guidelines augmented as necessary by the *U.S. EPA Voluntary Guidelines for Methylamphetamine Laboratory Clean-up* – March 2013 (See Reference Section). The program should also take account of the Mitigating Factors discussed above.

If there is uncertainty about the location of any operations of the clan lab at the site or if there is the possibility of areas contaminated by use of methylamphetamine e.g. by smoking, then additional sampling may be necessary.

Management

Depending on the outcome of the sampling program, remediation and validation are likely to be required. This management work should take account of the Mitigating Factors listed above and should be based on the National Guidelines. It is recommended that any identified meth smoking-related contamination be also remediated.

Completed work should be documented in the form of a report as outlined in Attachment 5.

Personal protective equipment and clothing (PPE)¹ (Tier 2)

The guidance provided below is a direct extract from the National Guidelines. It takes a generic and conservative approach which will be adequate for gross contamination situations but may be excessive for lower levels of contamination. Consequently, for Tier 1 clan labs, the PPE guidance provided in Attachment 3 to these Guidelines will be more appropriate. Even for many Tier 2 sites a less rigorous PPE regime may be suitable. This may be by using the Tier 1 guidance but with a full or half face respirator with minimum organic vapour cartridge for initial entry (and P2 mask after one hour for ventilation) and double gloving. If uncertain about the severity of the contamination or in more severe contamination scenarios, then use of the following guidance.

Attachment 3 should also be referred to for guidance in undertaking a safety risk analysis before entering a clan lab site.

The following is provided to guide those attending clandestine laboratory sites after the police and forensic chemistry team are no longer in attendance. While the following recommendations describe PPE appropriate for most cases, specific instances of gross contamination may require the use of more sophisticated PPE e.g. breathing apparatus. In this event, only persons who have undergone appropriate training in the use of the equipment are to utilise same. Safety is the responsibility of those attending the site hence consultation with emergency services personnel and/or safety equipment specialists is recommended.

Preparation – prior to entering a Tier 2 site

Before entering the site, the police officers who processed the site for safety and evidence purposes should be contacted and any potential hazards discussed. Regardless of the level of site contamination as determined by attending police officers, as a recommended minimum, those attending a clandestine laboratory site should wear:

Respiratory/Eye protection: A full face mask air purifying respirator (APR), equipped with broad spectrum cartridges that filter dusts, organic vapour, acid vapour, solvents and ammonia / methylamine. APR's are to be decontaminated after use. Cartridges are to be replaced dependent on contaminant burden as per manufacturer's instructions and disposed of as hazardous waste after use. Those using the APR's must be trained in their use in accordance

¹ Appendix 3 from *the Guidelines for Environment Investigation, Remediation and Validation of former Clandestine Laboratory Sites* – 2011

with manufacturers' recommendations. The wearing of separate eye protection and half face APR's or dust masks is not recommended as these do not provide a comparable level of protection nor the comfort of a full- face APR.

Hand protection: 'Nitrile' disposable gloves offer adequate hand protection against chemical contamination under most circumstances arising during sample collection. Additional protection may be achieved through the donning of a second set in instances where puncture or tearing is possible. When sharp, rough or significantly contaminated surfaces are present, consideration should be given to the use of heavy-duty Neoprene gloves. Gloves should be changed regularly hence access to appropriately sized gloves in quantity will be required. Gloves are not to be re-used and are to be disposed of as hazardous waste. Use of latex or vinyl gloves is not acceptable as they do not adequately protect against a range of chemical substances.

Foot protection: Two alternative types of suitable foot protection are available:

- Boots – these may be either lace up or of a rubber or 'gum' boot design and constructed of materials which are resistant to chemical attack. These offer protection against a range of chemical substances and may be decontaminated after each use.
- Disposable latex or plastic overshoes. These should fit properly and be disposed of as hazardous waste after single use. (While paper overshoes are available, their use is not recommended. They are generally only suited for protecting against dusts and particulates and offer little protection from liquids).

Skin and clothing protection: Disposable cover all suits with an integrated hood are suited for the purpose and are available in a variety of materials which offer differing levels of protection against exposure to chemical contaminants. The range from composite fabrics e.g. Tyvek® offering protection principally against dust and particulates only as many liquids will penetrate the fabric after relatively short exposure periods. A higher level of protection is offered by coverall suits or 'splash suits' manufactured from a variety of laminated chemical resistant materials e.g. Tychem®. While these offer penetration resistance to a range of chemicals, they are not 'chemical proof'. These suits cannot be effectively decontaminated and are intended for single use only, after which they are to be disposed of as hazardous waste.

The choice of suit composition, and PPE in general, should be made on a case by case basis and be based on site specific information including the degree and nature of contamination, and with reference to the maker's specifications for the PPE garment.

Air monitoring instrumentation: When first entering an indoor clandestine laboratory site, the site is to be checked with a properly calibrated and functioning gas detection equipment. The gas detection monitor must, as a minimum, detect oxygen and lower explosion limit levels. Before beginning sampling or inspection, the air throughout the premises must be assessed. Special attention is to be paid to close to the floor as many solvent vapours are heavier than air and may accumulate in low lying sections. If levels are detected above set alarm levels, people must immediately evacuate the premises and seek assistance from fire and emergency service before re-entering.

Post site investigation

After visiting the site, a sampling plan should be developed. The sampling program applies primarily for Tier 2 sites given the uncertainty and possibly severity of contamination that may be associated with these types of clan labs. The sampling plan can be subsequently incorporated in final form into the site's management report.

The key guidance regarding the sampling program for Tier 2 sites are the National Guidelines augmented as necessary by the *U.S. EPA Voluntary Guidelines for Methylamphetamine*

Laboratory Clean-up – March 2013 (See Reference Section). The program should also take account of the Mitigating Factors discussed above.

If there is uncertainty about the location of any operations of the clan lab at the site or if there is the possibility of areas contaminated by use of methylamphetamine e.g. by smoking, then additional sampling may be necessary.

Attachment five – management report contents

For any clan lab where post notification action is undertaken this should be documented in the form of a report. This report should provide contextual information about the site and details of the activities undertaken including their rationale. The report should not only be submitted to the client but also WA Health as per these Guidelines.

The report should be properly referenced and include photographs, diagrams and result summary tables to help communicate information about the site.

The expected contents of a clan lab management report (T1 and T2) should as a minimum include the following, depending on the nature of the management actions:

- contents page
- purpose
- executive summary (if appropriate)
- property details and description, including owner and regulatory jurisdiction
- details of consultant and remediation contractor
- outline of clan lab activities, and tier rating of property
- details and results of initial site survey, including areas of potential contamination and other hazards
- description of any sampling undertaken including methods, rationale and results
- details of and rationale for any remediation conducted as a result of contamination
- description of the validation undertaken with results, following any remediation
- statement in regard to the adequacy of management work undertaken, habitability of the home, and compliance with Guidelines. Some qualifying statements may be used.
- attachments
 - Notification Form
 - NESR
 - laboratory reports
 - receipts of waste disposal (when appropriate)
 - details of safety precautions taken, including PPE.

This document can be made available in alternative formats on request for a person with disability.

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