1: METH AND ITS HEALTH EFFECTS

		IN	NI	NP	O

IN = Inspected NI = Not Inspected NP = Not Present O = Observation

Information

How does meth affect the body?

DEQ Meth Health Impact

Why 1.5 µg/100 cm² is a justified health and clearance standard

Why 1.5 µg/100 cm² is a justified health and clearance standard

The 1.5 µg/100 cm² methamphetamine standard, as adopted and enforced by the Montana Department of Environmental Quality (DEQ), is not an arbitrary number. It is a **health-based, conservative threshold** derived from documented human health effects observed at substantially higher exposure levels, then intentionally reduced through multiple safety factors to protect the most vulnerable occupants. These **safety factors account for uncertainty** in toxicology data, frequent contact with indoor surfaces, hand-to-mouth behavior, and long-term residential exposure—especially for children, pregnant women, and individuals with underlying health conditions.

The DEQ's use of this standard reflects how methamphetamine exposure actually occurs in homes: primarily through skin contact, ingestion from contaminated surfaces, and the transfer of residues to personal belongings, rather than through short-term or isolated exposure events. By setting the allowable surface residue level well below levels associated with known health effects, the 1.5 µg/100 cm² criterion provides a wide margin of safety for ongoing occupancy, not just initial re-entry after cleanup.

From a regulatory standpoint, 1.5 µg/100 cm² also serves as an appropriate clearance standard. It is low enough to be health-protective, yet high enough to be consistently measured using validated laboratory methods, allowing remediation work to be verified through objective post-remediation wipe sampling. When a property meets this standard, DEQ recognizes that contaminated residues have been adequately removed or controlled, supporting issuance of a Certificate of Fitness or closure documentation and confirming that the dwelling is suitable for re-occupancy.

Why this matters to buyers and renters

For buyers and renters, the 1.5 µg/100 cm² standard provides clarity, consistency, and protection. It establishes a clear, enforceable benchmark for what is considered safe under state oversight, rather than leaving safety determinations to subjective opinions or disclosure alone. When a property meets the DEQ standard, occupants can be confident that the home has been evaluated against a health-based threshold designed for long-term living, not merely cleaned to look acceptable.

This also protects future occupants from inheriting hidden risk. Clearance testing at this level reduces uncertainty about lingering contamination, supports informed real estate decisions, and provides documented assurance that the property has met Montana's requirements for habitability. In this way, the 1.5 µg/100 cm² standard protects not only health, but also financial and legal interests, giving buyers and renters a defensible basis for confidence in the safety of the home.

How does meth contaminate the structure?

Methamphetamine manufacturing or consumption spreads toxins throughout a structure, leaving residues on surfaces, upholstery, HVAC systems, and appliances.

2: SAMPLING

Information

Equipment

ALS Environmental Lab kit(s)

Scope Of Work

Surface Swab (Discrete), School, Single Family Dwelling, Methamphetamine, Private Dwelling on Public School

This is a dwelling located on a school property that has been rented out. There was a concern about meth contamination in the property that is being investigated.

Location of Samples & Photos

Closet, Bedroom, Cold Air Return

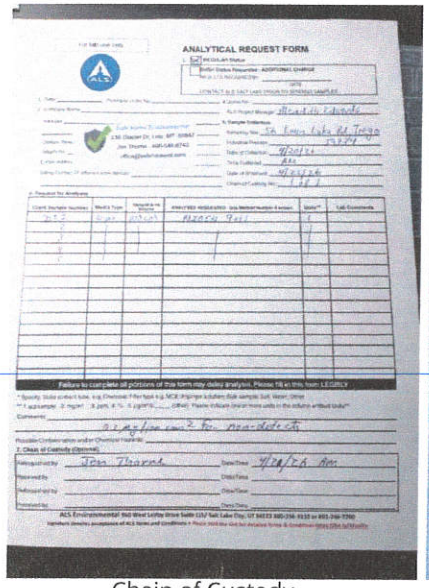
DS1 - Master Bedroom Closet

DS2 - Closet by Bathroom

DS3 - Closet by Laundry Room

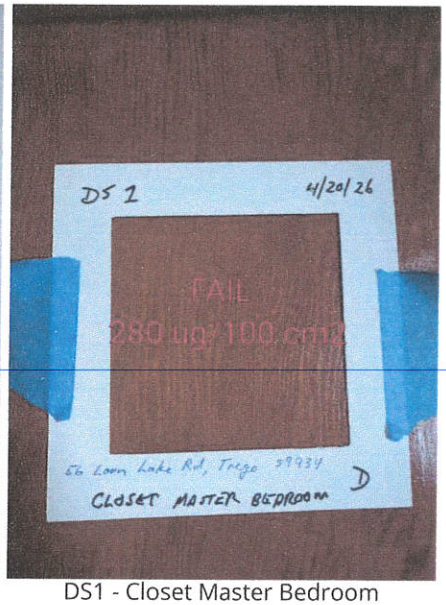
DS4 - Cold Air Rtn in Furnace

DS5 - Field Blank for quality control



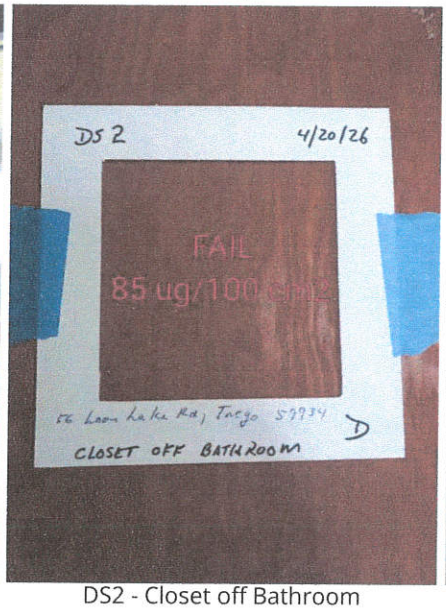
Chain of Custody

DS1 - Perspective

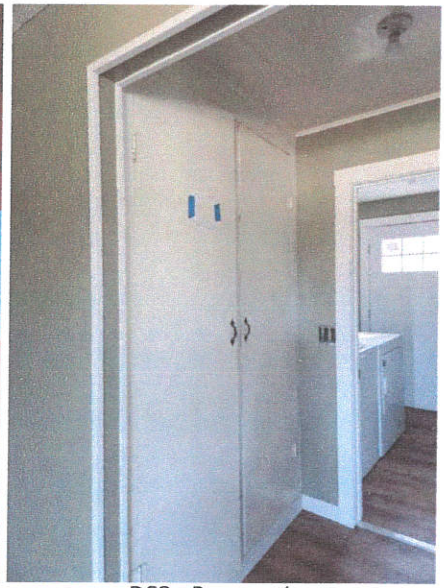


DS1 - Closet Master Bedroom

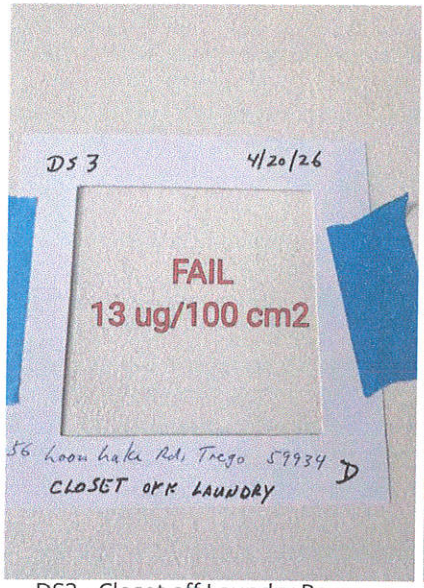
DS2 - Perspective



DS2 - Closet off Bathroom

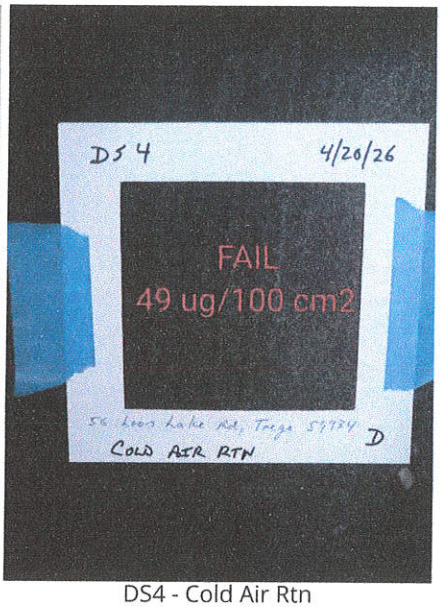


DS3 - Perspective

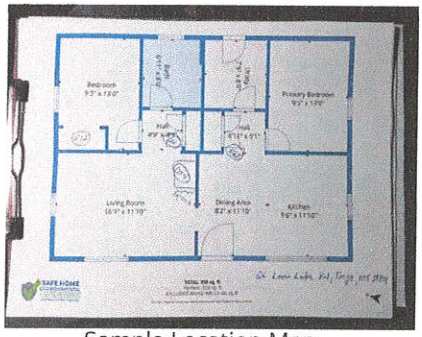


DS3 - Closet off Laundry Room

DS4 - Perspective



DS4 - Cold Air Rtn



Sample Location Map

Reason For Sample Location Selection

Common Location Of Use, Unpainted Surfaces

All sampling is based on the judgment of the DEQ Certified Contractor looking for a worst-case sample location.

Testing Method

All testing is sent to ALS Environmental using their test kits. One Field blank is included in every test set as a quality control measure.

Four to eight test sites are selected in each test set determined at the time of testing by the qualified inspector or test tech. ALS Environmental Lab also uses a "test blank" to ensure they do not contaminate the analyzed samples. The lab analysis method used is the NIOSH 9111 Method.

Limitations

Details

RESULTS LIMITED

The test results reported are only representative and limited to the specific areas and time frame of test(s). Concerning results ought to be retested and addressed by an environmental remediation specialist.

Details

AREAS OF CONCERN

Areas tested are determined by the most likely affected, if any, in the inspector's opinion.

Conclusions

LIMITATIONS OF SAMPLING

Montana DEQ Methamphetamine Testing – Limitations Statement

Methamphetamine residue testing conducted in accordance with Montana Department of Environmental Quality (MT DEQ) guidance is intended to determine whether sampled surfaces meet the State of Montana clearance standard of 1.5 µg/100 cm^2 at the specific locations tested and at the time of sampling. **Laboratory results reported as non-detect or below this standard indicate regulatory compliance for those sampled locations only.**

Surface wipe sampling is **inherently limited** and cannot evaluate all surfaces or materials within a structure. While Safe Home Environmental (SFHM) uses its training, experience, and professional judgment, considering client concerns, building layout, heating and air movement patterns, visible indicators, and use history, to select sampling locations most likely to identify methamphetamine residue if present, the results represent only a portion of the total surface area. As a result, methamphetamine residue may exist in unsampled or inaccessible areas even when all analytical results are below the MT DEQ clearance standard.

Methamphetamine testing should be interpreted as a regulatory compliance assessment performed under MT DEQ guidance **and does not constitute a guarantee** that methamphetamine residue is absent from the property. Test results reflect site conditions at the time of sampling and within the limitations of the approved sampling strategy.

Observations

3.1.1 Conclusions

Safety Hazard

METH TEST RESULTS - POSITIVE

The presence of meth for at least one sample was > 1.5 ug/100 cm2. The "actionable" standard is > 1.5 ug/100 cm2.

The results of testing indicate the levels of meth or its known chemical derivatives were **found to be above acceptable levels at one or more of the testing locations.**

Recommendation

Contact a qualified deq meth certified contractor

3.1.2 Conclusions

Safety Hazard

SUMMARY (POSITIVE)

The current standard for decontamination is > 1.5 ug/100 cm2 (read as equal to or greater than 1.5 micrograms per 100 centimeters squared of methamphetamine).

Properties with contamination levels that exceed this standard **are required to be decontaminated and retested** to ensure contaminant levels are below 1.5. One or more locations in the house tested above 1.5

DS1 - Master Bedroom Closet - FAIL - 280 u/100 cm2

DS2 - Closet by Bathroom - FAIL - 85 u/100 cm2

DS3 - Closet by Laundry Room - FAIL - 13 u/100 cm2

DS4 - Cold Air Rtn in Furnace - FAIL - 49 u/100 cm2

DS5 - Field Blank for quality control - Non-detect

Recommendation

Contact a qualified deq meth certified contractor

3.1.3 Conclusions

Safety Hazard

RECOMMENDATION FOR POSITIVE RESULTS

For properties that are tested by analytical lab results showing any result of >1.5 ug/cm2 by MT annotated code 17-74-501. MCA requires the property owner to disclose this finding when either renting or selling the property. It is recommended that the property be remediated by a DEQ Certified Contractor.

Recommendation

Contact a qualified deq meth certified contractor