



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

April 23, 2009

Deanne Kelly
Solid Waste Specialist
Tri-county Health
Commerce City Office
4201 E. 72nd Ave.
Commerce City, CO 80022

RE: 1812 E. 164th Place, Thornton, Colorado

Dear Ms. Kelly:

FACTs was contacted and asked to perform a methamphetamine compliance assessment of a property located at 1812 E. 164th Place, Thornton, Colorado.

The property was reported to have been remediated pursuant to Colorado regulations. Our assessment indicated the following:

- The initial property assessment was not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- The property was not remediated pursuant to Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- Final clearance sampling confirmed the presence of levels of methamphetamine at concentrations in excess of Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- Final clearance sampling and activities were not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- Colorado Criminal Fraud Statutes may have been infringed by both the previous industrial hygiene firms.

Pursuant to §38-35.7-103 a copy of this letter of noncompliance has been sent to the seller's representative, Safeguard Properties.

FACTs has a duty to provide the Governing Body with the attached discussion.

Sincerely,

Caoimhín P. Connell
Forensic Industrial Hygienist



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Industrial Hygiene Assessment
And Notice of Noncompliance
of an Unoccupied
Illegal Drug Laboratory
at
1812 E 164th Place
Thornton, Colorado**

Prepared for:
Confidential Recipient
Prospective Buyer

Prepared by:

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

185 Bounty Hunter's Lane
Bailey, CO 80421



April 23, 2009

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EXECUTIVE SUMMARY

Forensic Applications Consulting Technologies, Inc. (FACTs) was contacted to perform a compliance assessment at the residence located at 1812 E 164th Place, Thornton, Colorado (the subject property) based on available documents and a site visit. Based on the totality of the circumstances, FACTs makes the following findings:

- The initial property assessment was not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- The property was not remediated pursuant to Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- Levels of methamphetamine in excess of the State permitted limit continue to exist at the property.
- Final clearance sampling and activities were not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
- Colorado Criminal Fraud Statutes may have been infringed by both the previous industrial hygiene firms.
- The “final clearance” sampling performed by Koch Environmental demonstrated that methamphetamine levels are in excess of the mandatory cleanup levels.
- Most of the “final clearance” sampling performed by Koch Environmental was performed in violation of Colorado regulations and is invalid.
- Of the 27 samples submitted by Koch for analysis, 19 were invalid and cannot be used pursuant to State regulations.
- The property remains in a state of noncompliance with Colorado regulation 6 CCR 1014-3 and Colorado Statutes CRS 25-18.5-101 *et seq.*
- The document prepared by Century Environmental Hygiene, dated July 4, 2008 purporting to be a Preliminary Assessment, exhibits gross technical incompetence, is fatally flawed and fails to meet the minimum elements of a Preliminary Assessment, and cannot be used as a Preliminary Assessment.
- The final clearance activities performed by Koch Environmental were fatally flawed and failed to identify overt and abject and plain sight noncompliance issues at the property.
- An illegal drug lab, as that term is defined in CRS §25-18.5-101, remains in existence at the subject property.



- An illegal drug lab, as that term is defined in CRS §25-18.5-101 has existed at the subject property from at least June 16, 2008 forward to the present date.
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) remains in existence at the subject property.
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) has existed at the subject property from at least June 16, 2008 forward to the present date.
- “Discovery” and “Notification,” as those terms are used in CRS §25-18.5-103(1)(a) were issued on June 16, 2008
- To date, no Preliminary Assessment has been prepared for the property as required by state statute and state regulation.
- To date, no final clearance sampling has been performed pursuant to mandatory regulations.
- The document prepared by Koch Environmental Health Inc. and dated January 20, 2009, identified as “post-remediation sampling assessment” exhibits fatal flaws which render the Decision Statement invalid.
- If the property is sold as is, the seller (registered owner) would not receive the liability shield from toxic tort suits as described in CRS §25-18.5-103(2).
- If the property is sold as is, the buyer would have ninety days to bring the property into compliance pursuant to CRS §38-35.7-103.

The following sections describe our findings, rationale, methods, observations, conclusions and recommendations.

INTRODUCTION

FACTs, was contacted to perform a compliance evaluation for the subject property to include a standard cursory evaluation for the presence of methamphetamine at 1812 E 164th Place, Thornton, Colorado.

During the review, FACTs reviewed a PDF version of a document titled “Potential Clandestine Methamphetamine Laboratory Assessment Report.” The document was prepared by Koch Environmental Health Inc. and dated January 20, 2009. The document contained a second document prepared by Century Environmental Hygiene, Inc. and dated July 4, 2008.

Our assessment also included a visit to the subject property on April 19, 2009. During the site visit, we collected cursory samples for the analysis of methamphetamine. Also



during the site visit, FACTs collected approximately 116 photographs which have been archived at our office.

PRELIMINARY ASSESSMENT

According to Colorado State Regulation 6-CCR 1014-3, following the discovery of an illegal drug lab, as that term is defined in CRS §25-18.5-101, and following “notification,” the property must either be demolished or a “Preliminary Assessment” must be conducted at that property to characterize extant contamination (if any), and to direct appropriate decontamination procedures (if any). Pursuant to these regulations, information obtained in the Preliminary Assessment, must be used as the basis for remediation, and must be the basis for any final clearance sampling.

The Preliminary Assessment must be conducted according to specified requirements¹ by an authorized Industrial Hygienist as that term is defined in CRS §24-30-1402. Implicit in the regulations is the requirement that the Industrial Hygienist has been trained in aspects of clandestine drug labs. According to the regulations, during the assessment, the Industrial Hygienist is to perform hypothesis testing wherein:

The strength of evidence needed to reject the hypothesis is low, and is only that which would lead a reasonable person, **trained in aspects of methamphetamine laboratories**, to conclude the presence of methamphetamine, its precursors as related to processing, or waste products.

To our knowledge, the author of the Century Environmental Hygiene report has no specific knowledge of methamphetamine laboratories. Based on previous reviews^{2,3} of Century Environmental’s work, we have found that Century Environmental reports have exhibited gross technical incompetence with regard to methamphetamine, clandestine drug labs, and the State of Colorado methlab regulations and statutes.

A review of the current documents indicates, again, a lack of technical competence in methlab assessments and in understanding Colorado regulations.

Failure to Comply with Mandatory Elements of a Preliminary Assessment

Pursuant to State regulations, specific information must be included in the Preliminary Assessment (PA).

¹ Section 4 of 6 CCR 1014-3

² City of Evans, Colorado vs. Patrice Wayne, Motions Hearing Documentation, April 5, 2006

³ Preliminary Assessment of an Identified Illegal Drug Laboratory, December 30, 2007, Columbine Apartments, Unit A107, 605 Wickes Ave., Craig, Colorado 81625, on file with Saed Tayyara, County Commissioner, 221 W Victory Way #130, Craig, CO 81625



Section 4.0 Preliminary Assessment

Information collected during the preliminary assessment shall include, but not be limited to, the following:

Paragraph 4.2 Law Enforcement Documentation

Century failed to perform its duties and fulfill regulatory requirements by failing to determine if law enforcement documents were available. Pursuant to State regulations, the Industrial Hygienist is required to provide a:

Review of available law enforcement reports that provide information regarding the manufacturing method, chemicals present, cooking areas, chemical storage areas, and observed areas of contamination or waste disposal.

In its report, Century alluded to Thornton Police department records. Legitimate experts in the field of assessing clandestine drug laboratories are cognizant of the fact that Thornton is a participant of the North Metro Drug Task Force, who is responsible for maintaining most of the information associated with clandestine drug labs. Nowhere in the Century report, do we see where Century contacted the NMDTF or the Adams County Sheriff's office to determine if law enforcement documents were in fact available for this property. Nowhere in its report has Century documented how it contacted the Thornton Police Department, when, or who in the department was contacted to determine if documentation was available.

Paragraph 4.3 Identification of Functional Spaces

Century failed to perform its duties and fulfill regulatory requirements by failing to identify functional spaces within the property. Pursuant to this section, the Industrial Hygienist is required to include:

Identification of structural features that may indicate separate functional spaces, such as attics, false ceilings and crawl spaces, basements, closets, and cabinets.

According to State regulations 6 CCR 1014-3 (Section 3)

"Functional space" means a space where the spread of contamination may be expected to occur relatively homogeneously, compared to other functional spaces. The "functional space" may be a single room or a group of rooms, designated by a consultant who, based on professional judgment, considers the space to be separate from adjoining areas with respect to contaminant migration. Other typical examples of functional spaces include a crawl space, an attic, and the space between a dropped ceiling and the floor or roof deck above.

In its report, Century failed to perform the regulatory mandated identification of structural features that may indicate separate functional spaces, such as attics, false ceilings and crawl spaces, basements, closets, and cabinets. Instead, Century merely stated:

Functional spaces were identified as the whole occupiable portion of the house, the basement, attic and HVAC system.



Therefore, Century appears to identify only four functional spaces for a residence that it reports as covering 2,968 square feet. It is difficult to understand how a consultant could have identified only four functional spaces for such a large area. During our assessment at the property, we identified the following eighteen functional spaces:

1. Foyer
2. Dining room
3. Kitchen
4. Living room
5. Laundry room
6. Garage
7. Foyer bathroom
8. Downstairs staircase (this could be combine with the Downstairs Rec Room)
9. Downstairs Bedroom
10. Downstairs Rec Room
11. Downstairs furnace room
12. Upstairs stairway and hall
13. West central bedroom
14. North central bedroom
15. Jack and Jill bathroom
16. Master bedroom
17. Master bathroom
18. Attic
19. Crawlspace (probably would have been excluded)

It is for this reason, that Koch Environmental was more or less forced to create, after the fact, the 12 functional spaces they used for their final clearance sampling. Although the regulations require the final sampling to be conducted in the functional spaces identified in the Preliminary Assessment, in this case, Century failed to perform their professional duty to identify functional spaces, which forced Koch Environmental to go outside the regulations and identify their own functional spaces.

The functional space issue is further confused by the fact that while on the one hand Century failed to identify specific functional spaces, Century then collected samples from separate and distinct location in the total occupiable space for no apparent reason. That is, since Century identified “the whole occupiable portion of the house” as a single large functional space, why they did Century collect samples from various rooms? The objective of the identification of functional spaces is to identify areas where the levels of contamination may be distinctly different. The incongruous sampling behavior indicates a lack of understanding of the regulations, and sampling theory.

Paragraph 4.6 Identification of Areas of Contamination

Century failed to perform its duties and fulfill regulatory requirements by failing to identify or recognize signs of contamination. Pursuant to State regulations the Industrial Hygienist is required to provide:



Identification and documentation of areas of contamination. This identification may be based on visual observation, law enforcement reports, proximity to chemical storage areas, waste disposal areas, or cooking areas, or based on professional judgment of the consultant; or the consultant may determine that assessment sampling is necessary to verify the presence or absence of contamination. If the consultant determines that assessment sampling is necessary, such sampling shall be conducted in accordance with the sampling protocols presented in Appendices A and D. Sample analysis shall be conducted in accordance with the method requirements presented in Appendices B and D.

In this case, Century merely stated in its report:

No specific signs of contamination were identifiable, as noted above.

Furthermore, in its report, Century stated:

No staining on walls, floors or ceiling anywhere in the house that could be clearly attributed to meth production was observed (sic).

However, since Century apparently did not inspect the ventilation system, or the plumbing system, and did not appear to perform a functional space inventory, it is not clear how this assessment was made. Additionally, given the gross technical incompetence exhibited by Century during the project, it is not clear if Century would have had the technical expertise to have identified signs of contamination. Indeed, during our visit, we did observe overt staining and visible signs of contamination and we also observed overt signs of manufacturing of methamphetamine at the property. Therefore, either Century did not perform a visual inspection, or Century lacked the technical competency to recognize the signs that were (still) present during our visit.

Paragraph 4.11 Evaluation of the Plumbing System

Century failed to perform its mandatory obligations by failing to meet the regulatory requirements of a plumbing inspection. Pursuant to State regulation, the Industrial Hygienist is required to provide:

Inspection of plumbing system integrity and identification and documentation of potential disposal into the sanitary sewer or an individual sewage disposal system (ISDS). ...

Century explicitly shrugged responsibility for completing this regulatory obligation by stating in their report:

A plumber should inspect the plumbing system to verify integrity.

In fact, Century should have performed the inspection as required by regulation. The inspection is not only a mandatory requirement, it is also normal standard industry practice. It is difficult to understand how on the one hand, Century could accept the professional obligation to perform a Preliminary Assessment, (which explicitly requires an inspection of the plumbing integrity), and at the same time fail to perform that regulatory and contractual obligation. We believe that, based on our previous reviews,



and this subject property, Century Environmental Health has never actually read the Colorado regulations pertaining to methamphetamine.

In its report, Century also states:

If cooking occurred, waste could have been anywhere but would likely have included the sanitary sewer.

Therefore, since Century makes this observation, and it is the exclusive role of Century to identify areas of contamination, it would be expected that Century would have inspected the sanitary sewer. During our site visit, the toilet lids were closed and sealed with tape, and placarded with label indicating the fixtures had been winterized and the tape placed over the toilet lids on November 12, 2007. Therefore, failed to perform its duty to inspect the sanitary sewer in spite of the fact that Century explicitly recognized the possibility that waste products may have been discarded down the sewer.

Paragraph 4.14 Photographic Record

During the Preliminary Assessment, the Industrial Hygienist is required to provide:

Photographic documentation of property conditions, including cooking areas, chemical storage areas, waste disposal areas, and areas of obvious contamination.

Century explicitly shrugged responsibility for completing this regulatory and contractual obligation by stating in their report:

Photographs are not available due to camera malfunction.

Nowhere in state regulations is there a regulatory relief for a malfunctioning camera. Since decontamination cannot occur until the completion of a Preliminary Assessment, and entry into the property is prohibited by statute, the conditions at the property at time Century issued its report would have been the same as at the time of the site visit. As such, since Century was aware of the fact that their camera malfunctioned, they had a regulatory and contractual obligation to return to the site and performed the mandatory element of the Preliminary Assessment of photography. Failing to perform that mandatory duty constitutes malpractice, and displays gross neglect of duty.

6.0 Sampling and Analytical Procedures.

Century failed to perform its duties and fulfill regulatory requirements by failing to perform sampling pursuant to mandatory regulatory requirements. According to State regulations:

6.0.1 Except as provided in 6.0.2, assessment sampling shall be conducted as part of the preliminary assessment to characterize the nature and extent of contamination. Assessment sampling and laboratory analysis shall be conducted in accordance with Appendices A, B and D of these regulations.

Paragraph 6.1 Locations of Samples



Locations of samples shall be based on information gathered during the preliminary assessment. Samples shall be collected from:

6.1.1. Areas expected to **have the highest levels** of contamination, such as cooking areas, chemical storage areas, and waste disposal areas

In the Century report, the author states:

Sample locations were generally selected in a more or less random manner.

Elsewhere in the report, Century states:

However, a reasonable effort was made to collect samples from random locations which supports the idea that the samples provide a representative indication of meth levels i.e. "average" meth levels.

If Century had been familiar with the Colorado State regulations, Century would have known that random sampling was prohibited by the regulations. If Century had been competent in sampling theory, Century would have been aware that the "random" sampling it performed could not have been used to predict "representative sampling." As even specified in Colorado's regulations:

Sampling Theory

The type of sampling used for stationary structures and vehicles described in this protocol is a type of sampling recognized as "authoritative" sampling. Authoritative sampling is a nonstatistical sampling design that **does not** assign an equal probability of being sampled to all portions of the population. Consultants using this protocol will have *a priori* knowledge of the property to be sampled. The *a priori* knowledge, in the hands of a competent consultant, permits immediate inclusion/exclusion of sampling areas, based on professional judgment. As such, the weight of validity of the data gathered with authoritative sampling is largely dependent on the knowledge and competency of the sampler.

The Colorado regulations continue with:

Biased Sampling

Biased sampling is the type of authoritative sampling that intends **not to estimate average concentrations** or typical properties, **but to estimate "worst" or "best" cases** (as described in ASTM Method D6051-96 (2001), Standard Guide for Composite Sampling and Field Subsampling for Environmental Waste Management Activities. As described later in this protocol, the aim of the consultant performing post-decontamination sampling is to demonstrate the worst-case scenario in the drug laboratory. The term "biased," as used here, refers to the collection of samples with expected high concentrations. For example, a sample taken at the source of the actual "cook," known release, spill or storage area could serve as an estimate of the "worst-case" concentration found in the functional space.

Century Environmental exhibited gross technical incompetency in understanding Colorado's methlab regulations, and that lack of technical incompetence translated into gross errors and omissions during their work.



Samples were collected from nonporous surfaces...

Yet three of the six samples collected by Century were collected from porous surfaces. It would appear that Century merely uses the same boilerplate report for all properties regardless of site conditions.

DECONTAMINATION

The property was not decontaminated pursuant to State regulations.

Ventilation System

The ventilation system was not cleaned pursuant to State regulations. According to Colorado regulations, Appendix C:

8. Beginning with the outside air intake and return air ducts, clean the ventilation system using pneumatic or electrical agitators to agitate debris into an airborne state. Additional equipment may be also be used in the cleaning process, such as brushes, air lances, air nozzles, and power washers. Controlled containment practices shall be used to ensure that debris is not dispersed outside the air conveyance system during cleaning.

During our site assessment, we observed, in plain view, in the opened ventilation duct in the foyer a mound of dog food and other debris in the duct system. Had the remaining duct work been addressed in even the most rudimentary fashion, this debris would have been removed.

Plumbing

The plumbing system was not decontaminated pursuant to mandatory State requirements (in fact, the plumbing system was simply not decontaminated at all).

Pursuant to Colorado decontamination regulations:

5.6. Water flushing of plumbing systems connected to the sanitary sewer to eliminate any residual chemicals.

The initial Century report was issued on July 4, 2008 and the Koch “final” report was issued on January 20, 2009. Therefore decontamination work had to have taken place at some point in between those two dates. As already mentioned, the toilets were sealed and the seal was dated November 12, 2007. During our visit, FACTs broke the seals and lifted the lids of the toilets and the toilet cisterns. We observed debris and staining in the toilets and in the cisterns. The sealed had not been disturbed on the toilets since they were applied in November of 2007. In violation of Colorado regulations, the toilets were never water flushed as required by regulation.

Furthermore, visible debris was present in each and every water basin (sinks, showers, bathtubs, etc). None of the water basins had been cleaned pursuant to Colorado regulations.



Overall, the quality of the decontamination we observed, not only failed to meet the minimum regulatory requirements, but was generally extremely poor quality.

FAILURE TO COMPLY WITH MANDATORY ELEMENTS OF FINAL CLEARANCE PROVISIONS

Koch Environmental failed to perform its regulatory and contractual obligations. The final clearance sampling performed by Koch confirmed that methamphetamine concentrations exceeded the allowable limits – however, Koch ignored the sample results and declared the property compliant.

The work by Koch Environmental failed to meet the minimum standards as specified by regulation. The work by Koch exhibited gross technical incompetence. In stark contradiction to the Colorado regulations pertaining to the cleanup of methamphetamine laboratories, Koch Environmental appears to have ignored all overt signs of noncompliance and collected samples from the property.

According to Colorado regulations:

*In post-decontamination sampling, the hypothesis is made that the area is non-compliant, and data is collected to test the hypothesis. The role of the consultant in post decontamination sampling is **not** to demonstrate that the area is “clean,” but rather, using biased sampling, to diligently attempt to prove that the area is not clean. The lack of data supporting the hypothesis leads the consultant to accept the null hypothesis and conclude that the area is compliant.*

Pursuant to this requirement, Koch was obligated to diligently attempt to “prove” that the remediation was not successful. Upon entering the property, it was apparent within a few seconds that the final hypothesis **was** supported by observable facts, the property **was** overtly noncompliant, and Koch should have declared the property noncompliant, the results of any sampling notwithstanding.

Even an extremely poorly trained or unobservant consultant could hardly have failed to notice the bright blue tape on the toilets, the debris in the water basins, the red staining in the cisterns, and the mound of mouldy dog food in the ventilation duct. Within only seconds, a diligent consultant exercising even rudimentary skills should have realized that the property had not been cleaned pursuant to minimum State regulations.

According to Colorado mandatory regulations, the State explicitly provides the decision criteria for issuing a Decision Statement. The State mandates that **if there is no other evidence to support the hypothesis of noncompliance, only then can samples be used to test the compliance status of the property.** The mandatory language reads as follows:

Decision Statement

If, based on the totality of the circumstances, the consultant finds that insufficient evidence exists to support the hypothesis that any given area is non-compliant, that area shall be deemed to be compliant with section 25-18.5-103 (2), C.R.S., and shall be



released. If objective sampling data indicates contamination is less than the cleanup level, that data may be used as *prima facie* evidence that insufficient evidence exists to support the hypothesis that any given area is non-compliant.

For this property, overt, objective, and abject visible evidence immediately supported the hypothesis that the property was noncompliant, and would prohibit the release of the property without the collection (and indeed, regardless of the collection) of any samples.

Invalid Compliance Sampling

Koch Environmental failed to comply with mandatory sampling requirements. Koch Environmental completely ignored the abject visible signs of noncompliance and collected samples in spite of the visible evidence of noncompliance. Remarkably, even the samples collected by Koch indicated noncompliance and objectively indicated that the property was still contaminated. Koch ignored their own results and in spite of their own sample results, declared the property compliant. In its report, Koch Environmental explicitly states that one of the areas sampled exceeded the Statutory cleanup level for methamphetamine. However, Koch then erroneously states that

Per CDPHE requirements, these two areas were re-sampled... (sic)

Nowhere in State regulations or State statutes does this “requirement” exist. Indeed, explicitly, the opposite exists, and the Consultant was required by State regulations to accept the failed results as evidence that the property was noncompliant. At that point, Koch had the statutory, and professional obligation to require recleaning. Merely collecting another set of samples until one finds compliant concentrations is a gross deviation from regulation, statutory obligations and professional obligations.

Instead, Koch ignored the regulations, ignored their statutory obligations, fabricated nonexistent requirements, and merely re-sampled the area without requiring proper remediation, and then in violation of State regulation, issued a Decision Statement.

Failure to Collect Samples

In addition to collecting samples that it should not have collected, Koch Environmental also failed to collect samples that would have been required. According to State regulations:

For any given functional space, at least 500 cm2 of surface shall be sampled, unless the area is assumed to be non-compliant.

In this case, Century identified the attic and the HVAC system as functional spaces. By regulation, Koch was obligated by regulation to clear these areas by samples. Koch failed to collect samples from these identified functional spaces.

Collection of Incompatible Sample Composites

Koch performed composite sampling that is prohibited by State regulations. According to Colorado regulations,



Composite Sampling

... Any composite sampling must consist of like media, matrices or substrates. **The mixing of media, matrices or substrates is not permitted.** All individual samples (designated as g), from which any single composite is formed must be of equal volume (for liquids), equal surface area (for surface wipe sampling or vacuum sampling) or equal weight (for solids).

During its sampling, in violation of State regulations, Koch mixed sample substrates. The following list identifies each of the sample composites that contained prohibited mixed substrate samples, and by which are invalid samples:

- Sample 1812-03 (painted dry wall mixed with varnished wood)
- Sample 1812-09 (painted drywall mixed with ceramic tile)
- Sample 1812-10 (painted drywall mixed with ceramic tile)
- Sample 1812-12 (painted drywall mixed with OSB)
- Sample 1812-15 (painted drywall mixed with OSB)
- Sample 1812-17 (painted wood mixed with OSB)
- Sample 1812-18 Painted drywall mixed with OSB, and mixed with porcelain and mixed with plastic)
- Sample 1812-19 (painted drywall mixed with OSB)
- Sample 1812-20 (painted drywall mixed with OSB)
- Sample 1812-21 (OSB mixed with metal)
- Sample 1812-22 (metal mixed with drywall)
- Sample 1812-26 (bare drywall mixed with bare plywood, mixed with painted particle board)

Failure to Test the Final Hypothesis

As already mentioned, Koch Environmental samples indicated noncompliance, but Koch Environmental declared the property as compliant anyway. Furthermore, the samples that Koch Environmental collected did not meet the objectives of the regulation.

As already described, during sampling, the Industrial Hygienist is required by regulation to sample from those areas that are expected to have the highest levels of contamination. Yet Koch collected samples from areas that are expected to have the **LOWEST** levels of contamination including:

- Sample 1812-01 Floor Composite.
- Sample 1812-05 Floors
- Sample 1812-06 Countertops
- Sample 1812-07 Countertops
- Sample 1812-10 Floor composite
- Sample 1812-13 Water Basin composite
- Sample 1812-17 Floor composite
- Sample 1812-18 Floors and water basins
- Sample 1812-20 Floor
- Sample 1812-02B Floor



- Sample 1812-21 Floor drain and floor
- Sample 1812-24 Floor
- Sample 1812-26 Floor

Floor Samples

The regulation explicitly require samples to be collected from the areas which have the greatest potential for elevated methamphetamine concentrations. In the case of the floor samples, the floors would be expected to exhibit the lowest possible concentrations. This is because at the time of final sampling, the carpet were removed, and the floors would have exhibited extreme disturbance. Furthermore, usually (although not in this case), the floors of a property are usually one of the surfaces that is frequently cleaned more than once.

Counter Tops

The samples for the counter tops would have represented sample locations that would have a low probability of exhibiting noncompliant contamination even in an active laboratory. This because the surface is readily cleaned, often cleaned (even by the meth cook), and easily cleaned. During remediation, remediation contractors are very likely to re-clean kitchen counter tops several times.

Water Basins and Floor Drains

The species of methamphetamine under consideration is water soluble. Therefore, surfaces likely to be of have been wet are similarly those same surfaces that are least likely to exhibit contamination. Collecting a sample from these areas is contrary to the intent and the explicit language of the regulations. Any water flowing over the surface would effectively wash away any surface methamphetamine, thus biasing the results low, where methamphetamine may otherwise be present. The sampling location indicates either gross incompetence and a lack of understanding of contaminant migration, and a lack of understanding of the regulations.

Appendix A – Prohibition of Sampling from Porous Materials

Koch Environmental collected samples from prohibited surfaces. Appendix A of the regulations explicitly prohibits the collection of final clearance samples from porous surfaces:

Wipe sampling shall not be used to demonstrate that cleanup levels have been met on porous surfaces.

Furthermore, State regulations state:

Non-Porous Surfaces - Wipe Samples

Wipe sampling shall be used to determine the extent of contamination on **non-porous** surfaces. Wipe samples shall be collected in accordance with the procedures set forth below for either discrete **or** composite samples.

The following list presents the samples which were collected from prohibited surfaces:



- Sample 1812-01
- Sample 1812-05
- Sample 1812-09
- Sample 1812-10
- Sample 1812-12
- Sample 1812-15
- Sample 1812-18
- Sample 1812-19
- Sample 1812-20
- Sample 1812-02B
- Sample 1812-22
- Sample 1812-24
- Sample 1812-26

Failure to Collect Sufficient Number of Samples

Koch failed to collect a sufficient number of samples mandated by State regulation.

Pursuant to Colorado Regulations:

Buildings and Structures

Wipe Sample and/or Vacuum Sample

For drug laboratories, as defined in section 25-18.5-101, C.R.S., whose structural floor plan is not greater than 1,500 square feet, surface sampling shall be collected according to the following schedule. ...

- For any given functional space, at least 500 cm² of surface shall be sampled, unless the area is assumed to be non-compliant.
- At least 1,000 cm² of total surface area must be sampled for any single laboratory identified pursuant to section 25-18.5-103, C.R.S.
- An additional 100 cm² must be sampled for every additional 500 square feet of structural floor space.
- No fewer than five samples shall be collected from any laboratory identified pursuant to section 25-18.5-103, C.R.S.

The following table presents a complete summary of samples Koch Environmental collected from the property. The samples shaded gray are invalid, as described in the previous sections and cannot be used for final clearance – the remaining samples are not shaded and are the only samples that may be used for final clearance:

1812-1	1812-2	1812-3	1812-4	1812-5	1812-6
1812-7	1812-8	1812-9	1812-10	1812-11	1812-12
1812-13	1812-14	1812-15	1812-16	1812-17	1812-18
1812-19	1812-20	1812-21	1812-22	1812-23	1812-24
1812-25	1812-26	1812-02B			



Therefore, of the 27 samples collected, only eight are valid and may be used for clearance purposes.

Since Colorado regulations require 500 cm² to be sampled from each functional space, Koch failed to collect 500 cm² of valid samples from the following functional spaces:

1. Dining Room
2. Living Room
3. Kitchen
4. Laundry
5. First Floor Bathroom
6. Master bedroom
7. East Bedroom
8. West Bedroom
9. Second Floor Bathroom
10. Basement
11. Utility Room
12. Garage
13. Attic
14. HVAC system

Paragraph 8.22 Certification and Variations

According to State regulations, the Industrial Hygienist is required to provide:

Certification of procedures and results, **and variations from standard practices.**

Nowhere in its report does Century identify each of the variations from the regulatory requirements as discussed in this review. Rather, Century signed a statement at the end of the document stating:

I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4.

However, the work objectively was not performed pursuant to with 6 CCR 1014-3, § 4.

Nowhere in its report does Koch Environmental identify each of the variations from the regulatory requirements as discussed in this review. Rather, Koch Environmental signed a statement at the end of the document stating that they conducted sampling according to regulation (which they did not) and that the sample results demonstrated that the sampling demonstrated that the cleanup standards had been met (which they have not):

Offering a False Instrument for Recording

According to Colorado's criminal code, CRS §18-5-114 (Offering a false instrument for recording), a person commits a class 5 felony when offering a false instrument for recording in the first degree if, knowing that a written instrument relating to or affecting



real or personal property or directly affecting contractual relationships contains a material false statement or material false information, and with intent to defraud, he presents or offers it to a public office or a public employee, with the knowledge or belief that it will be registered, filed, or recorded or become a part of the records of that public office or public employee.

Pursuant to State statute, and state regulations, the mandatory “Preliminary Assessment” of an illegal drug lab becomes filed with the “Governing Body” with jurisdiction wherein the property is located.

Either the previous consultants knew or did not know that the information in their documents was false. If they knew, then it appears to be a violation of a criminal statute, if they did not know, then it indicates that the consultants are not familiar with the Colorado regulations or statutes pertaining to methlabs and, therefore, are not authorized to have performed the work in the first place.

REGULATORY REVIEW

The State of Colorado currently has one methamphetamine regulation and three methamphetamine statutes that are germane to the subject property.

State Statutes

Environmental Statutes

Colorado has one of the country’s most comprehensive and scientifically based clandestine drug laboratory regulations. The Colorado regulations become applicable when the owner of a property has received “notification” from a peace officer that chemicals, equipment, or supplies indicative of a “drug laboratory” are located at the property, or when a “drug laboratory” is otherwise discovered,⁴ and the owner of the property where the “drug laboratory” is located has received notice.

In turn, “drug laboratory” is defined in Colorado Revised Statutes §25-18.5-101 as the areas where controlled substances have been manufactured, *processed*, cooked, disposed of, *or stored* and all proximate areas that are *likely* to be contaminated as a result of such manufacturing, *processing*, cooking, disposing, or *storing*. The definitions of an illegal drug lab includes smoking methamphetamine, since smoking is a process, and its mere presence in the context of illegal possession constitutes *storage* and therefore, an “illegal drug lab” as defined by State statutes.

Pursuant to State statute CRS §25-18.5-105(1), an illegal drug laboratory that has not met the cleanup standards set by the State Board of Health must be deemed a public health nuisance, and must either be demolished or remediated.

⁴ CRS §25-18.5-103



Property Statutes

Pursuant to CRS §38-35.7-103 (1) a buyer of residential real property has the right to test the property for the purpose of determining whether the property has ever been used as a methamphetamine laboratory.

The difficulties of CRS §38-35.7-103, notwithstanding, pursuant to CRS §38-35.7-103 (2)(a):

If the buyer's test results indicate that the property has been used as a methamphetamine laboratory but has not been remediated to meet the standards established by rules of the state board of health..., the buyer shall promptly give written notice to the seller of the results of the test, and the buyer may terminate the contract.

In this case, the conclusive presence of methamphetamine as discovered by Century Environmental Hygiene was a reasonable indicator that the property was used to manufacture methamphetamine.

Criminal Proceedings – Public Nuisance Statutes

Pursuant to State statute CRS §16-13-303(c)(1), every building or part of a building including the ground upon which it is situated and all fixtures and contents thereof, and every vehicle, and any real property shall be deemed a class 1 public nuisance when used for the unlawful storage or possession of any controlled substance, or any other drug the possession of which is an offense under the laws of Colorado. Based on CRS §16-13-303(c)(1), the presence of extant methamphetamine in the property was *prima facie* evidence of possession of the same.

CONCLUSIONS

The work that we reviewed contained numerous errors and omissions. FACTs did **not** perform a thorough critical review of the project or the submittals, rather our observations were superficial and cursory. We believe that a thorough critical review of the project would uncover numerous other errors and omissions.

Also, FACTs did not cover miscellaneous technical or mathematical errors in the reports. For example, in the Koch report, the authors of the report erroneously state:

A 200 cm² composite sample collected in on (sic) the west side of the basement (100 cm² each on the west wall and west floor) indicated surface concentrations of 0.28 micrograms (ug) (sic) methamphetamine per square centimeter (cm²). The CDPHE standard for a wipe sample comprised of 200 cm² is 0.25 ug/cm².

The statement is not correct. A wipe result of 0.25 µg/cm² in a 200 cm² area would be equal to 25.0 µg/100 cm², which is actually 100 times greater than would be permitted by the State of Colorado for a two parted, 200 cm² composite. These kinds of errors that indicate sloppy thinking and carelessness, were not part of our review.

Therefore, only the fatally flawed elements have been presented which include:



- The document prepared by Century Environmental Hygiene, dated July 4, 2008 purporting to be a Preliminary Assessment, exhibits gross technical incompetence, is fatally flawed and fails to meet the minimum elements of a Preliminary Assessment, and cannot be used as a Preliminary Assessment.
- The initial property assessment was not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
 - A. Several elements of the PA were missing
 - B. The final document contained false information
 - C. The document contained a materially false affidavit
 - D. Century failed to identify functional spaces
 - E. Century failed to diligently identify availability of law enforcement documents
 - F. Century failed to perform a photographic archive and photograph log
 - G. Century failed to perform a plumbing inspection
 - H. Century failed to perform a ventilation system inspection
 - I. Century failed to observe indications of staining
 - J. Century failed to observe the indicators of corrosion on the plumbing
 - K. Century offered a materially false affidavit knowing that affidavit would be filed with a public official.
- The property was not remediated pursuant to Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
 - A. The remediation company failed to water flush the plumbing system
 - B. The remediation contractor failed to clean surfaces to a concentration of methamphetamine below the statutory limit
 - C. The remediation contractor failed to clean the remaining ventilation ducts
- Final clearance sampling and activities were not performed in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.
 - A. Koch Environmental (EH) failed to collect a sufficient number of samples from the property
 - B. KE collected samples from prohibited surfaces
 - C. KE combined prohibited composites
 - D. KE failed to note the deficiencies of the remediators
 - E. KE permitted samples which demonstrated noncompliant levels of methamphetamine to be ignored
 - F. KE failed to properly challenge the final hypothesis
 - G. KE offered a materially false affidavit knowing that affidavit would be filed with a public official.
- The “final clearance” sampling performed by Koch Environmental demonstrated that methamphetamine levels in the property are in excess of the mandatory cleanup levels.
- Sampling performed by Koch Environmental was performed in violation of Colorado regulations and is invalid.



- Of the 27 samples submitted by Koch for analysis, 19 were invalid and cannot be used pursuant to State regulations.
- The property remains in a state of noncompliance with Colorado regulation 6 CCR 1014-3 and Colorado Statutes CRS 25-18.5-101 *et seq.*
- The final clearance activities performed by Koch Environmental were fatally flawed and failed to identify overt and abject and plain sight noncompliance issues at the property.
- An illegal drug lab, as that term is defined in CRS §25-18.5-101, **remains in existence at the subject property.**
- An illegal drug lab, as that term is defined in CRS §25-18.5-101 has existed at the subject property from at least June 16, 2008 forward to the present date.
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) **remains in existence at the subject property.**
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) has existed at the subject property from at least June 16, 2008 forward to the present date.
- “Discovery” and “Notification,” as those terms are used in CRS §25-18.5-103(1)(a) were issued on June 16, 2008
- To date, no Preliminary Assessment has been prepared for the property as required by state statute and state regulation.
- To date, no final clearance sampling has been performed pursuant to mandatory regulations.
- The document prepared by Koch Environmental Health Inc. and dated January 20, 2009, identified as “post-remediation sampling assessment” exhibits fatal flaws which render the Decision Statement invalid.
- If the property is sold as is, the seller (registered owner) would not receive the liability shield from toxic tort suits as described in CRS §25-18.5-103(2).
- If the property is sold as is, the buyer would have ninety days to bring the property into compliance pursuant to CRS §38-35.7-103.

We believe that this report is covered by CRS §38-35.7-103 *et seq.* and therefore, FACTs has an obligation to forward this discussion to the Governing Body with jurisdiction over the property.:



Deanne Kelly
Solid Waste Specialist
Tri-county Health
Commerce City Office
4201 E. 72nd Ave.
Commerce City, CO 80022
RE: 1812 E. 164th Place, Thornton, Colorado

RECOMMENDATIONS

FACTs recommends that a State mandated Preliminary Assessment be performed at the property as required by State statutes and State regulations, by a legitimate Industrial Hygienist trained in the aspects of Clandestine Drug Laboratories.

Based on the Preliminary Assessment, we recommend that legitimate remediation effort be conducted at the property pursuant to State regulations.

Following the remediation, we recommend that a legitimate final assessment be performed at the property pursuant to regulations.

Prepared by:



Caoimhín P. Connell
Forensic Industrial Hygienist



APPENDIX A CONSULTANT'S SOQ





FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

CONSULTANT STATEMENT OF QUALIFICATIONS

(as required by State Board of Health Regulations 6 CCR 1014-3 Section 8.21)

FACTs project name:	1812	Form # ML15
Date:	April 23, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Caoimhín P. Connell, is a private consulting forensic Industrial Hygienist meeting the definition of an "Industrial Hygienist" as that term is defined in the Colorado Revised Statutes §24-30-1402. Mr. Connell has been a practicing Industrial Hygienist in the State of Colorado since 1987 and has been involved in clandestine drug lab (including meth-lab) investigations since May of 2002.

Mr. Connell is a recognized authority in methlab operations and is a Certified Meth-Lab Safety Instructor through the Colorado Regional Community Policing Institute (Colorado Department of Public Safety, Division of Criminal Justice). Mr. Connell has provided over 200 hours of methlab training for officers of over 25 Colorado Police agencies, 20 Sheriff's Offices, federal agents, and probation and parole officers from the 2nd, 7th and 9th Colorado judicial districts. He has provided meth-lab lectures to prestigious organizations such as the County Sheriff's of Colorado, the American Industrial Hygiene Association, and the National Safety Council.

Mr. Connell is Colorado's only private consulting Industrial Hygienist certified by the Office of National Drug Control Policy High Intensity Drug Trafficking Area Clandestine Drug Lab Safety Program, and P.O.S.T. certified by the Colorado Department of Law (Certification Number B-10670); he is a member of the Colorado Drug Investigators Association, the American Industrial Hygiene Association, and the Occupational Hygiene Society of Ireland.

He has received over 120 hours of highly specialized law-enforcement sensitive training in meth-labs and clan-labs (including manufacturing and identification of booby-traps commonly found at meth-labs) through the Iowa National Guard/Midwest Counterdrug Training Center and the Florida National Guard/Multijurisdictional Counterdrug Task Force, St. Petersburg College as well as through the U.S. Bureau of Justice Assistance (US Dept. of Justice). Additionally, he received extensive training in the Colorado Revised Statutes, including Title 18, Article 18 "Uniform Controlled Substances Act of 1992."

Mr. Connell is also a current law enforcement officer in the State of Colorado, who has conducted clandestine laboratory investigations and performed risk, contamination, hazard and exposure assessments from both the law enforcement (criminal) perspective, and from the civil perspective in residences, apartments, motor vehicles, and condominiums. Mr. Connell has conducted over 117 assessments in illegal drug labs, and collected over 1,200 samples during assessments (complete list is available from our web site).

He has extensive experience performing assessments pursuant to the Colorado meth-lab regulation, 6 CCR 1014-3, (State Board Of Health *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*) and was an original team member on two of the legislative working-groups which wrote the regulations for the State of Colorado. Mr. Connell was the primary contributing author of Appendix A (*Sampling Methods And Procedures*) and Attachment to Appendix A (*Sampling Methods And Procedures Sampling Theory*) of the Colorado regulations. He has provided expert witness testimony in civil cases and testified before the Colorado Board of Health and Colorado Legislature Judicial Committee regarding methlab issues. Mr. Connell has provided private consumers, state officials and Federal Government representatives with forensic arguments against fraudulent industrial hygienists and other unauthorized consultants performing invalid methlab assessments.

Mr. Connell, who is a committee member of the ASTM International Forensic Sciences Committee, was the sole sponsor of the draft ASTM E50 *Standard Practice for the Assessment of Contamination at Suspected Clandestine Drug Laboratories*, and he is an author of a recent (2007) AIHA Publication on methlab assessment and remediation.