



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Industrial Hygiene
Regulatory Audit
Illegal Drug Laboratory**

Finding of Noncompliance

**at
673 Shooks Lane, Colorado Springs, CO 80903
(HUD Property Case Number: 052-598069)**

Prepared by:

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EXECUTIVE SUMMARY

At the request of a remediation contractor, FACTs reviewed the July 2, 2013 report from Titan Environmental Services¹ for the property located at 673 Shooks Lane, Colorado Springs, CO 80903 (HUD Property Case Number: 052-598069).

In general, similar to the previous work by Titan Environmental Services (TES),² none of the work performed by TES for the Shooks property is in compliance with Colorado's mandatory illegal drug laboratory decontamination regulations. This report identifies approximately 60 violations of Colorado's Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.³

In violation of State regulations, cleaning efforts were performed at the property in the absence of a Preliminary Assessment.

The document identified by TES as a "CLANDESTINE DRUG LAB POST-REMEDIAL ASSESSMENT REPORT" is later identified as a "Preliminary Assessment." However the document is neither a Preliminary Assessment as defined by regulation, and is similarly not a valid pot remediation verification report, and is fatally flawed.

The document was not prepared by an individual documented as being an Industrial Hygienist. The document was not prepared by an individual documented as being capable or qualified under regulation to perform such work.

The document identified as a Preliminary Assessment exhibited gross technical incompetence in regulatory compliance and illegal drug laboratory assessment.

FACTs identified no fewer than 60 violations of Colorado's Regulations including:

- Failure to Clear Functional Space Number 1, 2, 3, 4, 5, 7, 9 (there were no Spaces identified as 6 or 8)
- Sampling Violation: Prohibited Surfaces
- Sampling Violation: Mixed Matrices
- Violation Appendix A – Hypothesis Testing
- Violation of 6.1.1 Failure to Challenge Highest Contamination Levels
- Violation of Section 4.3 – Identification of Functional Spaces
- Violation of 5.1 Failed to Use Negative Pressure Containment
- Violation of 6.1.2 Failure to Clear the Ventilation System
- Violation of Appendix A Failure to Clear Crawlspace
- Violation of Appendix A Failure to Clear Attic
- Failure to Comply with Section 4.0
- Violation of Section 8.0
- Failure to Comply With Paragraph §8.1

¹ P.O. Box 410295, Kansas City, MO 64141

² 5571 E. 66th Way Commerce City, CO 80022 (HUD Property Case Number: 052-260679)

³ STATE BOARD OF HEALTH Regulations 6 CCR 1014-3, Adopted January 19, 2005, effective March 30, 2005



- Failure to Comply With Paragraph §8.2
- Failure to Comply With Paragraph §8.3
- Failure to Comply With Paragraph §8.4
- Failure to Comply With Paragraph §8.5
- Failure to Comply With Paragraph §8.6
- Failure to Comply With Paragraph §8.7
- Failure to Comply With Paragraph §8.8
- Failure to Comply With Paragraph §8.9
- Failure to Comply With Paragraph §8.10
- Failure to Comply With Paragraph §8.13
- Failure to Comply With Paragraph §8.14
- Failure to Comply With Paragraph §8.15
- Failure to Comply With Paragraph §8.16
- Failure to Comply With Paragraph §8.17
- Failure to Comply With Paragraph §8.18
- Failure to Comply With Paragraph §8.19
- Failure to Comply With Paragraph §8.20
- Failure to Provide Authorized Personnel
- Violation of §8.21
- Violation of Section 8
- Failure to Comply With Paragraph §8.22
- Failure to Comply With Paragraph 8.23
- Colorado Criminal Code – Fraud; Offering a false instrument for recording

For this review, we have ignored the many, many small errors (for example where TES claim their sample wipes comprised of 400 square feet).

FACTs has also performed a regulatory audit of the work by Titan Environmental Services for the property located at 5571 E. 66th Way Commerce City, CO 80022 (HUD Property Case Number: 052-260679). In that review, which was identified as a Preliminary Assessment, we identified technical incompetence, and an overt failure to comply with Colorado’s Drug Lab regulations.

Introduction

Before a remediation of an illegal drug laboratory may occur in Colorado, a “Preliminary Assessment” must be completed. The Preliminary Assessment is a mandatory element of compliance, and specific elements must be included in the performance of the Preliminary Assessment.

Following the remediation action, an Industrial Hygienist, with training and experience in Colorado’s regulations and the assessment of illegal drug laboratories is required by regulation to assess the property for adequacy of decontamination and, if necessary, collect a specific number of samples, of a specific size from specific locations. If a Functional Space fails, that area is necessarily, by regulation, isolated and recleaned by the contractor.

For this property at no time, did any of the verification sampling conform to State requirements.



Failure to Clear Functional Spaces

TES failed to collect the minimum mandatory samples that would have been required had the Preliminary Assessment been performed properly. 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 their report, Titan Environmental Services states:

For any given functional space identified by TES, at least 400 cm² of surface was sampled and submitted as composite.

At no time, and in no area identified by TES was the minimum 500 square centimeters of surface are collected.

In their report, TES identified the following Functional Spaces:

1. Living Room	2. South East Bedroom
3. Kitchen	4. 2 Stairways
5. 2 Bathrooms	6.
7. Basement	8.
9. Southwest Bedroom	10.

(The above table was directly reproduced from the TES report – thus the errors of skipping Functional Spaces 6 and 8, are actually those of TES).

Violation of Appendix A Failure to Clear Functional Space Number 1

For this area, TES was required to clear the area with a minimum of 500 square centimeters. However, TES only collected 300 cm² instead of the minimum mandatory 500 cm². In their report, TES claims they only collected 400 cm², however, one of the samples used in the composite was collected from the living room floor thus violating the following two provisions:

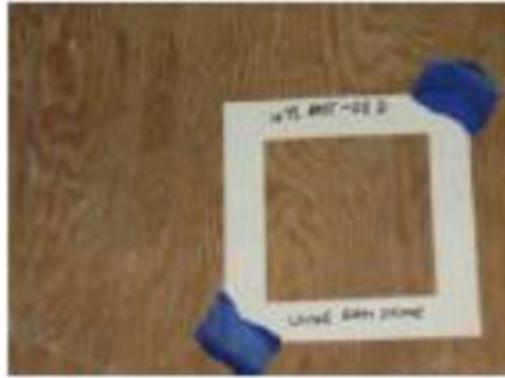
Sampling Violation: Prohibited Surfaces

The mandatory sampling requirements of Appendix A of 6 CCR 1014-3 state:

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

Yet, TES collected a wipe sample from the porous, bare wood in the living room as clearly documented in their report with the following photograph:





Living Room Floor.jpg

Sampling Violation: Mixed Matrices

The mandatory sampling requirements of Appendix A of 6 CCR 1014-3 state:

Any composite sampling must consist of like media, matrices or substrates. The mixing of media, matrices or substrates is not permitted.

For this area, TES collected mixed matrices, and composited those matrices (for a total of only 400 cm²).

Violation Appendix A – Hypothesis Testing

According to the mandatory Appendix A:

Post-Decontamination sampling

*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.*

For this Functional Space, (and throughout the entire residence) TES failed to sample areas with the highest probable concentrations of methamphetamine; failing to comply with the mandatory sampling hypothesis.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

Consultant experience and training lies at the heart of Compliance Sampling to demonstrate compliance with 6 CCR 1014-3. The consultant is required, by state regulation, to collect very specific samples from very specific locations that represent the highest possible contaminant concentrations. If the consultant has no known or documentable training or knowledge in clandestine drug lab assessments and no documentable training or knowledge of the State regulations, (such as in this case) they cannot conceivably perform the sampling in a manner that meets State requirements.

State regulations require that final verification samples 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

Of the samples collected by TES, only one of the samples could be argued to come from areas that represent the highest probability of contamination (identified by TES as “Basement Ceiling C Dust.” However, even this sample creates serious problems for TES as described later.

Since TES lacks any documentable knowledge of clandestine drug lab assessments, and lacks any documentable training regarding Colorado’s regulations, they have no knowledge of the thermophoretic mechanisms involved in contamination migration and deposition. It is precisely for this reason, TES has collected samples from grossly inappropriate areas (ignoring the fact that TES collected samples from explicitly prohibited areas).

Thus for example, TES collected samples from bare wooden floors, linoleum flooring, side walls and other areas that would have the lowest probability of demonstrating contamination. A legitimate, trained Industrial Hygienist would not have sampled these area since they would have understood the deposition mechanisms and known these areas have the lowest probability of being contaminated. Except for one sample, none of the samples collected by TES represent the highest probable level of contamination.

Violation of Appendix A Failure to Clear Functional Space Number 2

For this Functional Space, TES stated they only collected 400 cm² instead of the minimum mandatory 500 cm². However, none of the samples collected can be used to clear the Functional Space.

Sampling Violation: Prohibited Surfaces

Yet, TES collected a wipe sample from the porous, bare wood in the southeast bedroom as clearly documented in their report with the following photograph:



SE Bedroom Floor.jpg



Sampling Violation: Mixed Matrices

For this area, TES collected mixed matrices, and composited those matrices. TES sampled 1) bare wood (prohibited anyway), 2) acoustic popcorn ceiling 3) painted drywall.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination

Violation of Appendix A Failure to Clear Functional Space Number 3

For this Functional Space, TES stated they only collected 400 cm² instead of the minimum mandatory 500 cm². However, since the composite consisted of mixed matrices, even the 400 cm² cannot be used.

Sampling Violation: Mixed Matrices

For this area, TES collected mixed matrices, and composited those matrices. TES sampled 1) painted dry wall, 2) ceramic flooring, 3) acoustic ceiling.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination

Violation of Appendix A Failure to Clear Functional Space Number 4

Before we address this area, we must first note that the area cannot be a “Functional Space” as presented by TES.

Violation of Section 4.3 – Identification of Functional Spaces

According to the regulations, specific areas must be divided into specific Functional Spaces. A legitimate, properly trained Industrial Hygienist, knowledgeable in the assessment of methamphetamine labs would have met the mandatory regulatory requirements:

Section 4.3

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.



Therefore, the two separate stairways would have unique contamination profiles and cannot be the same “Functional Space.” Having said that, even if they actually were one Functional Space, TES only collected 200 cm² instead of the mandatory 500 cm².

Consultant experience and training lies at the heart of compliance sampling to demonstrate compliance with 6 CCR 1014-3. The Industrial Hygienist is required to apply their specially acquired training and knowledge of illegal drug laboratories in the application of their sampling plan. If the Industrial Hygienist has no such training, and no such knowledge, there is absolutely no way that individual can possibly know where or why to collect a sample and therefore cannot meet the regulatory requirements.

For this property Titan Environmental Services has demonstrated gross technical incompetence and has not demonstrated even the most rudimentary knowledge of illegal drug laboratories or the Colorado regulations.

By state regulation, the Industrial Hygienist is required to collect very specific samples from very specific locations that represent the highest possible contaminant concentrations. If the consultant, such as in this case, has no known or documentable training or knowledge in clandestine drug lab assessments and no documentable training or knowledge of the State regulations, they cannot conceivably perform the sampling in a manner that meets State requirements.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination

Violation of Appendix A Failure to Clear Functional Space Number 5

The identified area (two different bathrooms) cannot be a “Functional Space” as presented by TES.

Violation of Section 4.3 – Identification of Functional Spaces

According to the regulations, specific areas must be divided into specific Functional Spaces. A legitimate, properly trained Industrial Hygienist, knowledgeable in the assessment of methamphetamine labs would have known the two separate bathrooms cannot constitute the same Functional Space.

Having said that, even if they actually were one Functional Space, TES only collected 400 cm² instead of the mandatory 500 cm².

Sampling Violation: Mixed Matrices

For this area, TES collected mixed matrices, and composited those matrices. TES sampled 1) painted dry wall, 2) linoleum flooring.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination.



Violation of 5.1 Failed to Use Negative Pressure Containment

If a Functional Space fails, that area, by regulation, must be isolated with negative pressure enclosures and recleaned. According to the regulations:

“Negative air unit” means a portable exhaust system equipped with HEPA filtration and capable of maintaining a constant high velocity airflow out of the contaminated area, resulting in a constant low velocity air flow into the contaminated area from adjacent uncontaminated areas

Once an area had been declared as clean, it was an uncontaminated area and needed to be isolated from contaminated areas.

According to regulations:

5.1. A negative air unit, equipped with a HEPA filtration system, shall be used throughout the decontamination process to reduce airborne particulates.

If a Functional Space is not isolated, and is recleaned following a failed sample, all Functional Spaces contiguous with that area must also be re-sampled. This is because the act of re-cleaning that area can re-contaminate all other areas.

For this property, in violation of State regulations, TES never affirms that negative pressure enclosures were used at any time. Therefore, it is now possible that all residences adjoining 673 Shooks Lane, Colorado Springs are now contaminated.

Furthermore, since negative pressure enclosures were not employed when the second decontamination efforts were performed, each of the areas TES claimed they cleared, were re-contaminated, and even if the original sampling had been valid (which it was not), those samples would now be invalid.

There is no Functional Space 6 identified

Violation of Appendix A Failure to Clear Functional Space Number 7

Mixed matrices, prohibited surfaces and the failure to collect a minimum of 500 cm² all conspire to render the sampling in this space invalid.

Violation of Section 4.3 – Identification of Functional Spaces

The identified area has a crawlspace which TES failed to identify in their report. According to the regulations,

Section 4.3

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

Almost by definition, a crawlspace is a separate Functional Space. However, TES failed to identify this area.

In any event, TES only collected 400 square centimeters to represent this area.



Sampling Violation: Prohibited Surfaces

TES collected a wipe sample from the porous, bare concrete in the basement.

Sampling Violation: Mixed Matrices

For this area, TES collected mixed matrices, and composited those matrices. TES sampled 1) bare concrete (prohibited anyway) 2) sheet metal, 3) painted drywall.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination

There is no Functional Space Number 8 identified in the report.

Violation of Appendix A Failure to Clear Functional Space Number 9

Mixed matrices, prohibited surfaces and the failure to collect a minimum of 500 cm² all conspire to render the sampling in this space invalid.

Sampling Violation: Prohibited Surfaces

TES collected a wipe sample from the porous, bare wood in this area.

Sampling Violation: Mixed Matrices

For this area, TES collected mixed matrices, and composited those matrices. TES sampled 1) bare wood (prohibited anyway) 2) painted drywall, 3) acoustic ceiling material.

Violation of 6.1.1 Failure to Challenge Highest Contamination Levels

None of the sample collected in this area were collected from surfaces that would represent the highest probable areas of contamination

Violation of 6.1.2 Failure to Clear the Ventilation System

According to State Regulation 6 CCR 1014-3, following decontamination, the Industrial Hygienist is required to collect samples from the ventilation system to confirm decontamination. Section 6.0 of the State regulations generally addresses post decontamination verification sampling thusly:

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

6.1.2. Areas where contamination may have migrated, such as adjacent rooms or units, common areas, and ventilation systems.

No clearance samples were collected from the ventilation system. During their activities, in violation of Section 6.1.1 and Appendix A, TES merely collected a single 100 cm² sample from the intake of the ventilation system. No samples as required were collected from the interior of the ventilation system.



It is well established knowledge in the Industrial Hygiene and medical professions that the use of methamphetamine in a home results in elevated exposures to the occupants via airborne migration. When methamphetamine is even just smoked, between 80%⁴ and half⁵ of the substance is released from the user's pipe. Of that material which is inhaled, between 33%⁶ and 10%⁷ of the nominal dose is not absorbed into the body, but rather exhaled back into the ambient air.

Work conducted by Industrial Hygienists at the National Jewish Hospital⁸ in Denver indicate that a single use of methamphetamine, by smoking, could result in an average residential area ambient airborne concentration of methamphetamine ranging from 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to over 130 $\mu\text{g}/\text{m}^3$. These authors found that smoking methamphetamine just once in the residence can result in surfaces being contaminated with methamphetamine. The authors concluded:

*"If methamphetamine has been smoked in a residence, it is likely that children present in that structure will be exposed to airborne methamphetamine during the "smoke" and to surface methamphetamine after the 'smoke.'"*⁹

Since it is the purpose of the forced air ventilation system to move air throughout the structure, and the furnaces, as evidenced by the sample collected from the duct interior, which conclusively contained elevated concentrations of methamphetamine, we conclude the furnace remains an effective mechanism of dissemination of methamphetamine and may be a continued source of contamination until appropriately addressed.

⁴ Cook CE, *Pyrolytic Characteristics, Pharmacokinetics, and Bioavailability of Smoked Heroin, Cocaine, Phencyclidine, and Methamphetamine* (From: Methamphetamine Abuse: Epidemiologic Issues and Implications Research Monograph 115, 1991, U.S. Department Of Health And Human Services Public Health Service Alcohol, Drug Abuse, and Mental Health Administration National Institute on Drug Abuse)

⁵ Cook CE, Jeffcoat AR, Hill JM, et al. *Pharmacokinetics of Methamphetamine Self-Administered to Human Subjects by Smoking S-(+)-Methamphetamine Hydrochloride*. Drug Metabolism and Deposition Vol. 21 No 4, 1993 as referenced by Martyny JW, Arbuckle SL, McCammon CS, Erb N, Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)

⁶ Harris DS, Boxenbaum H, Everhart ET, Sequeira G, et al, *The bioavailability of intranasal and smoked methamphetamine*, Pharmacokinetics and Drug Disposition, 2003;74:475-486.)

⁷ Cook CE, Jeffcoat AR, Hill JM, Pugh DE, et al *Pharmacokinetics of methamphetamine self-administered to human subjects by smoking S-(+)-methamphetamine hydrochloride* Drug Metabolism and Disposition, Vol 21, No. 4, pp. 717-723, 07/01/1993

⁸ Martyny JW, Arbuckle SL, McCammon CS, Erb N, *Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine* (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)

⁹ Martyny JW, Arbuckle SL, McCammon CS, Erb N, *Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine* (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)



Violation of Appendix A Failure to Clear Crawlspace

No samples were collected from the crawlspace.

Violation of Appendix A Failure to Clear Attic

No samples were collected from the attic.

Failure to Comply with Section 4.0

For this property, no legitimate Preliminary Assessment was ever performed.

Section 8.0

Section 8 of the Colorado Regulations require a final report to be prepared. The final report must contain specific information.

***8.0 Reporting.** A final report shall be prepared by the consultant to document the decontamination process and demonstrate that the property has been decontaminated to the cleanup levels listed in Section 7.0 of these regulations. The final report shall include, but not be limited to, the following:*

Failure to Comply With Paragraph §8.1

According to the regulations, the final document is required to contain specific information including:

8.1. Property description including physical address, legal description, ownership, number and type of structures present, description of adjacent and/or surrounding properties, and any other observations made.

We did not see the legal description or any of the mandatory descriptive information in the document package.

Failure to Comply With Paragraph §8.2

According to the regulations, the final document is required to contain specific information including:

8.2. Description of manufacturing methods and chemicals used, based on observations, law enforcement reports and knowledge of manufacturing method.

TES failed to comply with this regulatory requirement and stated that no law enforcement documents were available. In its report, TES stated:

As stated in our pre-assessment report, TES is still currently unaware of the existence of any federal law enforcement activity report (i.e. El Paso Intelligence Center or EPIC form) related to methamphetamine manufacturing at this address. Again, TES reviewed the US Department of Justice National Clandestine Laboratory Database and found the subject address not listed at the time of generation of this report (list date 11/14/12).



The EPIC has nothing to do with the property, and EPIC is not the law enforcement agency with jurisdiction over the property. Although the property is in El Paso County, Colorado, the El Paso Intelligence Center (EPIC) is a Federal DEA and U.S. Customs Service Center assisting in the identification of drug traffickers and alien traffickers along the U.S. - Mexico border and is located at the Biggs Army Airfield in Texas.

There is no evidence in their report, that TES made any attempt to obtain law enforcement documents associated with the property. TES had the regulatory duty to provide the mandatory documentation in its final report, but did not provide any documents demonstrating they even contacted the correct agencies.

Failure to Comply With Paragraph §8.3

According to the regulations, the final document is required to contain specific information including:

8.3. If available, copies of 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.

Consultants have the obligation to determine if such documents are in fact available. TES failed to comply with this regulatory requirement. Instead, as noted above, TES checked a website for a Federal agency in Texas for a property in Colorado, and there is no indication that TES attempted to obtain or review pertinent law enforcement documents.

Failure to Comply With Paragraph §8.4

According to the regulations, the final document is required to contain specific information including:

8.4. A description of chemical storage areas, with a figure documenting location(s).

TES failed to meet this regulatory duty and failed to provide the mandatory information. This is partially due to the failure to perform the Preliminary Assessment according to regulations and partially due to its failure to determine law enforcement knowledge.

Failure to Comply With Paragraph §8.5

According to the regulations, the final document is required to contain specific information including:

8.5. A description of waste disposal areas, with a figure documenting location(s).

In their report, TES states:

No chemical, waste disposal or manufacturing areas were observed.

However, nowhere in the documentation is there any indication that the inspector, Ms. Karla Granger, has received ANY kind of training in the assessment of illegal drug laboratories, and neither is there any documentation that Ms. Granger has ANY experience or specialized training that would equip her to be capable of identifying such



areas. Similarly, as already noted, since TES failed to even request law enforcement documents, as required, there is no way to know if waste disposal areas were properly identified.

Also, as noted below, since TES failed to meet the regulatory requirement of including pre-remediation photographs in their post-remediation report, there is no way to confirm whether or not such areas existed.

Failure to Comply With Paragraph §8.6

According to the regulations, the final document is required to contain specific information including:

8.6. A description of cooking areas, with a figure documenting location(s).

Our observations made above regarding Section 8.5 also apply to the failure to comply with Section 8.6.

Failure to Comply With Paragraph §8.7

According to the regulations, the final document is required to contain specific information including:

8.7 A description of areas with signs of contamination such as staining, etching, fire damage, or outdoor areas of dead vegetation, with a figure documenting location(s).

Our observations made above regarding Section 8.5 also apply to the failure to comply with Section 8.7.

Failure to Comply With Paragraph §8.8

According to the regulations, the final document is required to contain specific information including:

8.8. The results of inspection of plumbing system integrity and identification of sewage disposal mechanism.

Our observations made above regarding Section 8.5 also apply to the failure to comply with Section 8.8.

Failure to Comply With Paragraph §8.9

According to the regulations, the final document is required to contain specific information including:

8.9. A description of adjacent units and common areas where contamination may have spread or been tracked.

Clearly the property is part of a multi-family housing structure. As such, there are numerous routes of contamination migration and common areas where contamination may have been tracked. Nowhere in the TES report, do we find where these areas have been identified as required.



Failure to Comply With Paragraph §8.10

According to the regulations, the final document is required to contain specific information including:

8.10. Identification of common ventilation systems with adjacent units or common areas.

As noted above, the property is part of a multi-family housing structure. As such, there are obvious common areas and adjacent units; TES failed to identify those adjacent units, and failed to describe whether or not the ventilation system is common or unique (in fact, TES failed to even address the ventilation system as required).

Failure to Comply With Paragraph §8.13

According to the regulations, the final document is required to contain specific information including:

8.13. A description of the location and results of initial sampling (if any), including a description of sample locations and a figure with sample locations and identification.

TES failed to identify any of the initial sampling (if any and failed to provide a figure of sample locations. Although drawing were included, the drawing merely identify the room in which a particular sample was collected but does not indicate sample location.

Failure to Comply With Paragraph §8.14

According to the regulations, the final document is required to contain specific information including:

8.14. A description of the health and safety procedures used in accordance with OSHA requirements.

TES failed to comply with this regulatory requirement and nowhere in the final documentation do we see where TES has provided this information.

Failure to Comply With Paragraph §8.15

According to the regulations, the final document is required to contain specific information including:

8.15. A description of the decontamination procedures used and a description of each area that was decontaminated.

We do not see where this information has been included in the copy of the TES report that we received.

Violation of 5.1 Failure to Identify Decontamination Contractor

According to Colorado Regulations:

5.5. Decontamination of ventilation systems by a contractor that is trained and equipped to comply with the protocol for ventilation system decontamination presented in Appendix C of these regulations.



Nowhere in the TES report do we find where the contractor has been identified, and therefore, there is no way to ensure this provision has been met. (As already stated, there is no evidence the ventilation system was ever actually cleaned.)

Failure to Comply With Paragraph §8.16

According to the regulations, the final document is required to contain specific information including:

8.16. A description of the removal procedures used and a description of areas where removal was conducted, and the materials removed.

We do not see where this information has been included in the copy of the TES report that we received.

Failure to Comply With Paragraph §8.17

According to the regulations, the final document is required to contain specific information including:

8.17. A description of the encapsulation procedures used and a description of the areas and/or materials where encapsulation was performed.

We do not see where this information has been included in the copy of the TES report that we received.

Failure to Comply With Paragraph §8.18

According to the regulations, the final document is required to contain specific information including:

8.18. A description of the waste management procedures used, including handling and final disposition of wastes.

TES failed to comply with this requirement, and we do not see where TES has provided the mandatory information.

Failure to Comply With Paragraph §8.19

According to the regulations, the final document is required to contain specific information including:

8.19. A description of the location and results of post-decontamination samples, including a description of sample locations and a figure with sample locations and identification.

Although drawing were included, the drawing merely identify the room in which a particular sample was collected but does not indicate sample location.



Failure to Comply With Paragraph §8.20

According to the regulations, the final document is required to contain specific information including:

8.20. Photographic documentation of pre- and post-decontamination property conditions, including cooking areas, chemical storage areas, waste disposal areas, areas of obvious contamination, sampling and decontamination procedures, and post-decontamination conditions.

TES failed to comply with this provision and offered a few limited views of some of the areas at the subject property. There were no photographs of the pre-remediation conditions as required.

Failure to Provide Authorized Personnel

One of the mandatory provisions, pursuant to state regulations promulgated by the Colorado State Board of Health and designated as “6 CCR 1014-3, Regulations Pertaining To The Cleanup Of Methamphetamine Laboratories” states that assessments of properties within the scope of the regulation can only be performed by Industrial Hygienists meeting the definition of Section 24-30-1402 of the Colorado Revised Statutes. For this property, the work was performed by Ms. Karla Granger. There is no indication that Ms. Granger is an Industrial Hygienist. Indeed, there is no information on Ms. Granger’s capabilities, experience, training, or knowledge in any aspect of any kind of Industrial Hygiene or assessment of illegal drug laboratories.

Violation of §8.21

Specific mandatory information is required to be included in the final verification documentation. Many elements of that final documentation must be included in the initial Preliminary Assessment, or it will not be available for inclusion in the final documentation. One of the items that must be included in the Preliminary Assessment for inclusion in the final documentation is:

8.21. Consultant statement of qualifications, including professional certification or qualification as an industrial hygienist as defined in section 24-30-1402, C.R.S., and description of experience in assessing contamination associated with methamphetamine labs.

The TES documentation provided to FACTs entirely failed to identify what training or capabilities are possessed by Mr. Granger that would make her proficient in the assessment of illegal drug laboratories or what qualifies her as an Industrial Hygienist.

Clearly, given the profound incompetence of the work by Titan Environmental Services, Ms. Granger does not possess any of the skills necessary to perform the work.

Violation of Section 8

According to State regulations:

8.0 Reporting. A final report shall be prepared by the consultant to document the decontamination process and demonstrate that the property has been decontaminated to



the cleanup levels listed in Section 7.0 of these regulations. The final report shall include, but not be limited to, the following

The TES report states the report was prepared by Kyle Gunion, an “Environmental Professional.” There is nothing in the documentation that indicates that either Ms. Granger or Mr. Gunion is an Industrial Hygienist.

Therefore, it is entirely unclear who did the work.

The TES report also states:

RE: IH Certification Statement
Post-Remedial Assessment Methamphetamine Environmental Testing
Case #: 052-598069 | 670 Shooks Lane, Colorado Springs, CO 80903

Dear Ms. Rossman,

I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4. Please don't hesitate to contact me with any questions or concerns. You can reach me directly at 816-507-8298 or my e-mail at kgranger@titankc.com.

Respectfully Submitted,



Karla Granger
Industrial Hygienist
Titan Environmental Services, Inc.

However in another project by TES that was performed by a mysterious person named John Carlisle, we find the following:

RE: IH Certification Statement
Pre-Assessment Methamphetamine Environmental Testing
Case #: 052-260679-5571 E. 66th Way, Commerce City, CO 80022

Dear Ms. Verschuur,

I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4. Please don't hesitate to contact me with any questions or concerns. You can reach me directly at 816-507-8298 or my e-mail at kgranger@titankc.com.

Respectfully Submitted,



Karla Granger
Industrial Hygienist
Titan Environmental Services, Inc.

For that project, there was no information whatever regarding the mysterious Mr. Carlisle who performed the work and virtually aspect of 6 CCR 1014-3 was followed, (FACTs



identified approximately 30 violations of State regulations).

Therefore, it would appear that TES merely provides the same language regardless of whether they are performing a post-remediation (which they erroneously call a “Preliminary Assessment”) or a report of unlawful pre-remediation sampling at a property that entirely fails to meet any aspect of 6 CCR 1014-3.

According to Colorado statutes:

24-30-1402. Definitions.

(2.2) "Industrial hygienist" means an individual who has obtained a baccalaureate or graduate degree in industrial hygiene, biology, chemistry, engineering, physics, or a closely related physical or biological science from an accredited college or university. The special studies and training of such individual shall be sufficient in the cognate sciences to provide the ability and competency to:

- (a) Anticipate and recognize the environmental factors and stresses associated with work and work operations and to understand their effects on individuals and their well-being;
- (b) Evaluate on the basis of training and experience and with the aid of quantitative measurement techniques the magnitude of such environmental factors and stresses in terms of their ability to impair human health and well-being;
- (c) (i) Prescribe methods to prevent, eliminate, control, or reduce such factors and stresses and their effects.

There is nothing in the TES report that indicates that Ms. Granger or Mr. Gunion has any special training or studies in the cognate sciences that speak to the ability and competency to anticipate and recognize the environmental factors and stresses associated with work and work operations and to understand their effects on individuals and their well-being.

If it turns out that Ms. Granger is an Industrial Hygienist and there is no indication that Ms. Granger has any knowledge of the assessment of illegal drug laboratories, and there is no documentation in the TES report that would indicate that Ms. Granger has any experience or training that would equip her to perform the work.

The mandatory regulations are incumbent on a trained Industrial Hygienist. An individual without industrial hygiene training will lack the necessary skills to perform the fundamental aspects of Industrial Hygiene associated with a property. An Industrial Hygienist without specialized training will lack the necessary skills to perform the fundamental functions of an illegal drug lab assessment.

Not only do the regulations and pertinent standards mandate the use of an Industrial Hygienist for an identified illegal drug laboratory, the regulations repeatedly allude to the necessity of that IH being trained and knowledgeable in clandestine drug laboratory operations and contamination.

For example, in the mandatory sections regarding pre-remediation assessments wherein the hypothesis of compliance is tested, the regulations explicitly state:



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.

Similarly, regarding contamination migration, the regulations explicitly state:

“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.

And:

4.6 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.

And:

Other outdoor surfaces should be evaluated based on **best professional judgment**. Wipe samples and destructive samples may be required.

And:

Composite sampling is permitted by this regulation, as described herein. The consultant may not use composite sampling unless in their **professional judgment**, contamination is expected to be relatively evenly dispersed throughout a given area, such that the sampling will accurately represent the conditions of the drug laboratory.

And so forth; the allusion to an appropriately trained IH is woven intrinsically into the regulation’s application of “professional judgment” and is needed for compliance.

Considering the gross incompetence exhibited by TES, and numerous violations of regulations documented, it is clear TES failed to provide a qualified Industrial Hygienist who was trained in the aspects of illegal drug laboratories and had any knowledge of the mandatory Colorado regulations which they were required to follow.

Failure to Comply With Paragraph §8.22

According to the regulations, the final document is required to contain specific information including:

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

In their final post-remediation report, TES has made the statement:

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



However, a Preliminary Assessment (and the provisions of Section 4) are applicable to a property prior to decontamination. And TES has identified their report as a post decontamination verification document. As such, the required language verifying the work was not included.

Although there are dozens and dozens of variations (errors, omissions, and violations), nowhere in the documentation do we find where TES has identified variations from the standard as required.

Failure to Comply With Paragraph 8.23

TES made a false certification, and failed to meet the provisions of the requirements of Paragraph 8.23 of 6 CCR 1014-3 which require the consultant to provide:

8.23. A signed certification statement in one of the following forms, as appropriate:

"I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4, and that I conducted post-decontamination clearance sampling in accordance with 6 CCR 1014-3, § 6. I further certify that the property has been decontaminated in accordance with the procedures set forth in 6 CCR 1014-3, § 5, and that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.

"I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, §4. I further certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted."

Colorado Criminal Code – Fraud; Offering a false instrument for recording

One of two mental states necessarily must have been present in the performance of the TES work: 1) Either TES knew that the work it was performing was grossly incompetent and not in compliance with State Regulations (as demonstrated above) or, 2) TES was unaware of the fact that their work was grossly deviating from mandatory State requirements.

If TES did not know that their work was grossly deviating from mandatory State requirements, then that is sufficient information to surmise that they lacked the technical competency and were therefore not qualified to perform the work in the first place since it would have been their professional obligation to conform to those regulations and perform work pursuant to the regulations.

Or, since TES has held itself out as being proficient in performing these assessments, and has stated that it is qualified and has stated that the work was performed according to regulations, then it is possible the work rises to criminal activity: According to Colorado Revised Statute 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” and the final report on post remediation sampling of an illegal drug lab is filed with the “Governing Body” with jurisdiction wherein the property is located.

TES explicitly states they possess knowledge of the regulations, and therefore, establish the fact that they are aware of such recording.

CONCLUSIONS

- No Preliminary Assessment has ever been performed at 673 Shooks Lane, Colorado Springs, CO 80903 as required by regulation.
- No documented decontamination efforts have been performed at 673 Shooks Lane, Colorado Springs, CO 80903 as required by regulation.
- No valid final clearance sampling has ever been performed at 673 Shooks Lane, Colorado Springs, CO 80903 as required by regulation.
- Based on the totality of circumstances, an illegal drug laboratory, as defined in Colorado Revised Statutes §25-18.5-101 exists at the subject property.
- Any seller who is aware of the presence of an illegal drug laboratory is required by Colorado Revised Statutes 38-35.7-103(3)(a) to disclose to any potential buyer, in writing, the presence of the same.
- Pursuant to Colorado Revised Statutes §25-18.5-104, it is unlawful for any person to occupy the residence.
- Pursuant to Colorado Revised Statutes §25-18.5-104, entry into the property is restricted by regulation.
- Pursuant to CRS §25-18.5-104, prohibition on entry extends to Real Estate agents, property owner(s), maintenance personnel, potential buyers, home inspectors, and any and all other personnel, except law enforcement personnel and personnel meeting the requirements of Title 29 of the Code of Federal Regulations, Part 1910.120(e).
- Pursuant to CRS §25-18.5-103, the Registered Owner of the property exclusively has two options: 1) commission an authorized Industrial Hygienist to perform a Preliminary Assessment as described in 6 CCR1014-3 (4.0 *et seq*), or 2) demolish the property.



- No exemptions are granted for regulatory compliance if the registered owner is “Fannie Mae,” “Freddie Mac,” or any other Federal or State Government lending program.
- Several unauthorized consultants (such as those employed by TES) have been performing unlawful consultation in illegal drugs labs in Colorado. Use of these consultants has resulted in serious litigation problems and will result in a fatal flaw in the work. This, or any other fatal flaw in compliance with the State Regulations, will prevent the registered owner from receiving the liability immunity provided by CRS §25-18.5-103(2).
- According to Regulation 6 CCR 1014-3, any cleaning and/or remediation and/or decontamination is strictly prohibited, except pursuant to a completed Preliminary Assessment.





**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:	Shooks Lane	Form # ML15
Date July 17, 2013		

Caoimhín P. Connell, has been involved in clandestine drug lab investigations since 2002 and meets the Colorado Revised Statute §24-30-1402 definition of an "Industrial Hygienist." He has been a practicing Industrial Hygienist since 1987 and was the contract Industrial Hygienist for the National Center for Atmospheric Research for over ten years. Mr. Connell is a recognized authority in drug-lab operations and is a Certified Instructor in Meth-Lab Safety through the Colorado Regional Community Policing Institute, CRCPI (through the Colorado Division of Criminal Justice) and was the lead instructor for the CRCPI providing over 260 hours of methlab training for over 45 Colorado Law Enforcement Agencies, federal agents, probation and parole officers throughout Colorado judicial districts. He has provided meth-lab lectures to the US Air Force, the National Safety Council, and the American Industrial Hygiene Association (of which he is a member and serves on the Clandestine Drug Lab Work Group and for whom he conducted the May, 2010, Clandestine Drug Lab Course, and is a coauthor of the AIHA methlab assessment publication.)

Mr. Connell is also a member of the American Conference of Governmental Industrial Hygienists, the Occupational Hygiene Society of Ireland, the Colorado Drug Investigators Association, an appointed Full Committee Member of the National Fire Protection Association And the ASTM International Forensic Sciences Committee, (where he was the sole sponsor of the draft ASTM E50 *Standard for the Assessment of Suspected Clandestine Drug Laboratories*.)

From 2009, Mr. Connell served as the Industrial Hygiene Subject Matter Expert on the Federally funded Interagency Board (Health, Medical, and Responder Safety SubGroup), and was elected full member of the IAB-HMRS in 2011 where he now serves. He is the only private consulting Industrial Hygienist in Colorado 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.

He has received over 144 hours of highly specialized law-enforcement sensitive training in illegal drug lab operation, and under supervision of the US Drug Enforcement Agency, he has manufactured methamphetamine using a variety of street methods. He has received highly specialized drug lab assessment training 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 US NHTSA, and 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" and is currently ARIDE Certified.

Mr. Connell is a current sworn law enforcement officer 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 374 assessments of illegal drug labs in Colorado, Nebraska and Oklahoma, and collected over 3,437 samples during assessments (a detailed list of drug lab experience is available on the web at):

<http://forensic-applications.com/meth/DrugLabExperience2.pdf>

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 and a NIOSH Recommended Peer Review Expert for the U.S. NIOSH 9109 Method, *Methamphetamine*. He has been admitted as a clandestine drug lab expert in Colorado, and an Industrial Hygiene Expert in Colorado civil and criminal courts and Federal Court in Pennsylvania; providing expert witness testimony in several criminal cases including Grand Jury testimony and testimony for US Bureau ATF and he testified before the Colorado Board of Health and Colorado Legislature Judicial Committee regarding methlab issues. Mr. Connell has provided services to private consumers, Indian Nations, State Investigators, and Federal Investigators with forensic services and arguments against corrupt regulators, fraudulent industrial hygienists, and unauthorized consultants performing invalid methlab assessments.

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