



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Industrial Hygiene
Regulatory Audit
Illegal Drug Laboratory**

Finding of Noncompliance

at

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

Prepared by:

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EXECUTIVE SUMMARY

At the request of a remediation contractor, FACTs reviewed the April 8, 2013 report from Titan Environmental Services¹ for the property located at 5571 E. 66th Way Commerce City, CO 80022 (HUD Property Case Number: 052-260679).

In general, similar to the previous work by Titan Environmental Services (TES), none of the work performed by TES for the Commerce City property is in compliance with Colorado's mandatory illegal drug laboratory decontamination regulations.

The sampling methods used by TES at the property were prohibited by State regulations.

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 PRE-ASSESSMENT REPORT" is not a Preliminary Assessment as defined by regulation, is fatally flawed, and cannot be used in lieu of a Preliminary Assessment.

The document identified as a Preliminary Assessment was not prepared by an individual documented as being an Industrial Hygienist. The document identified as a Preliminary Assessment 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 30 violations of Colorado's Regulations including:

- Failure to Provide Authorized Personnel
- Failure to Comply With Mandatory Elements of a Preliminary Assessment
- Failure to Comply With Paragraph 4.1
- Violation of §4.1 Legal Description
- Violation of §4.1 Property Description
- Violation of §4.1 Adjacent Property
- Failure to Comply With Paragraph 4.2
- Failure to Comply With Paragraph 4.3
- Violation of §4.3 Failure to Identify Crawlspace as a Functional Space
- Failure to Comply With Paragraph 4.4
- Failure to Comply With Paragraph 4.5
- Failure to Comply With Paragraph 4.6
- Failure to Comply With Paragraph 4.7
- Failure to Comply With Paragraph 4.8
- Failure to Comply With Paragraph 4.9
- Failure to Comply With Paragraph 4.10
- Failure to Comply With Paragraph 4.11

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



- Failure to Comply With Paragraph 4.14
- Failure to Comply With Section 6.0
- Violation of Section 6.2.1 Prohibited Sampling Technique
- Violation of Appendix A: Prohibited Locations
- Violation of Appendix A: Mandatory Sampling Theory
- Violation of 6.1.2 Failure to Address Ventilation System
- Failure to Comply With Paragraph 6.1
- Failure to Comply With Section 8
- Failure to Comply With Paragraph 8.14
- Failure to Comply With Paragraph 8.20
- Failure to Comply With Paragraph 8.21
- Failure to Comply With Paragraph 8.22
- Colorado Criminal Code – Fraud; Offering a false instrument for recording
- Colorado Criminal Code CRS 18-5-113. Criminal impersonation
- Potential Conflict of Interest

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 673 Shooks Lane, Colorado Springs, CO 80903 (HUD Property Case Number: 052-598069). In that review, which was identified as a post-remediation verification document, we identified gross technical incompetence, and an overt failure to comply with Colorado’s Drug Lab regulations. In that report, FACTs identified no fewer than 58 violations of Colorado’s Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.²

REVIEW OF THE PRELIMINARY ASSESSMENT

TES makes an abjectly false opening statement in its report:

TES conducted the environmental testing for former methamphetamine laboratory contamination in accordance with the U.S. Environmental Protection Agency (EPA) methods and State of Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories.

None of the work performed by TES is actually in compliance with Colorado Regulations Pertaining to the Cleanup of Methamphetamine Laboratories (6 CCR 1014-3).

The US EPA guidance document is not germane in Colorado since mandatory State regulations (6 CCR 1014-3) and the Tri-County Health Department Regulation IDL-06 for the Clean-Up Of Illegal Drug Laboratories³ take precedence over the EPA guidance document.

² STATE BOARD OF HEALTH Regulations 6 CCR 1014-3, Adopted January 19, 2005, effective March 30, 2005

³ Amended April 5, 2011, Effective April 6, 2011



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 requirements⁴ and must contain specific elements. Failure to comply with the regulations will invalidate the PA. In the following section, we have presented just a small portion of the errors, omissions, violations and fatal flaws associated with the TES report. The following list of errors is not exhaustive, or all inclusive, but is sufficient to demonstrate the entire report was prepared without regard to mandatory State regulations by an individual who is entirely unqualified to engage in this work.

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 Mr. John Carlisle. There is no indication that Mr. Carlisle is an Industrial Hygienist. Indeed, there is no information on Mr. Carlisle’s capabilities, experience, training, or knowledge in any aspect of any kind of work in any field or profession.

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 who the mysterious Mr. Carlisle may be, or what training or capabilities he has that would make him proficient in the assessment of illegal drug laboratories or why he thinks he is an Industrial Hygienist.

⁴ Section 4 of 6 CCR 1014-3



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

The report contradicts itself and identifies Karla Granger as an Industrial Hygienist and “inspector,” but states the report was actually 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
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.

However, we have seen this same false information on another document. In a July 2, 2013 document identified as a “POST-REMEDIATION ASSESSMENT REPORT” for 673 Shooks Lane, Colorado Springs, CO 80903, we see the following:

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.



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 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.

Even if it turns out that Ms. Granger is an Industrial Hygienist and even if the report was incorrect and Ms. Granger (and not Mr. Carlisle) performed the work, 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 Mandatory Elements of a Preliminary Assessment

According to Colorado State regulation 6 CCR 1014-3, when a Preliminary Assessment is conducted:

6 CCR 1014-3 4.0 Preliminary Assessment. A preliminary assessment shall be conducted by the consultant, in accordance with section 6.7 of this regulation, prior to



the commencement of property decontamination. ... Information collected during the preliminary assessment shall include, but not be limited to, the following:

Failure to Comply With Paragraph 4.1

According to State regulations, the Preliminary Assessment shall include a property description containing specific elements.

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

Violation of §4.1 Legal Description

TES failed to perform its regulatory and professional duty by failing to comply with this requirement. Nowhere within the documentation do we see where TES has provided the legal description for this property.

Violation of §4.1 Property Description

TES failed to perform its regulatory and professional duty by failing to comply with this requirement. Nowhere within the documentation do we see where TES has provided the number and type of structures involved.

Violation of §4.1 Adjacent Property

TES failed to perform its regulatory and professional duty by failing to comply with this requirement. Nowhere within the documentation do we see where TES has provided a description of adjacent and/or surrounding buildings.

Failure to Comply With Paragraph 4.2

According to State regulations, during the Preliminary Assessment, the Industrial Hygienist shall perform specific duties regarding law enforcement documentation:

4.2 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.

TES failed to perform its duties and fulfill regulatory requirements by failing to determine if law enforcement documents were available.

In its report, TES merely stated:

TES is 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. TES also 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 El Paso Intelligence Center has nothing to do with the property, and EPIC is not the law enforcement agency with jurisdiction over the property. The property is located in Commerce City, (Adams County), Colorado; as such Commerce City Police



Department, Adams County Sheriff's Office and the North Metro Drug Task Force have law enforcement jurisdiction. By contrast, 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 contact or obtain any law enforcement documents associated with the property as required by regulations. TES had the regulatory duty to attempt to identify and if available review and provide the mandatory documentation in its final report, but did not provide any documents demonstrating they even contacted the agencies with jurisdiction over the property.

Nowhere in the TES report does TES document any attempts to comply with State regulations and apparently made absolutely no attempt to obtain or review any enforcement documents as required by regulation. Therefore, the failure to perform this regulatory duty was apparently willful.

Failure to Comply With Paragraph 4.3

According to State regulations, during the Preliminary Assessment, the Industrial Hygienist shall perform specific duties that determine the potential for contamination migration, establish the grounds for decontamination and prepare the foundation for post clearance sampling by determining functional spaces. The Regulations explicitly require the Industrial Hygienist to:

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

TES failed to perform its duties and fulfill regulatory requirements by failing to identify functional spaces within the subject property that may be associated with unique contamination as required by regulation. Pursuant to this section of the regulations, the Industrial Hygienist is required to consider:

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, TES states:

1. Living Room	2. Bathroom
3. Kitchen	4. Garage
5. Attic	6. S.E. Bedroom
7. N.E. Bedroom	8.
9.	10.

Yet, elsewhere, in their report, TES states:

All surfaces within the interior of the residence, including hard-to-reach areas, nooks, crannies, the attic and crawlspace, etc.,

Violation of §4.3 Failure to Identify Crawlspace as a Functional Space

TES failed to identify the crawlspace as a Functional Space.

The establishment of Functional Spaces is absolutely integral to the utility of the Preliminary Assessment. Without the assessment and identification of the Functional Spaces, decontamination cannot properly occur, and without the identification of the Functional spaces, final clearance sampling cannot occur since State regulations require the clearance sampling to be based on those Functional Spaces that have been identified in the Preliminary Assessment.

It would appear that TES lacked the regulatory knowledge necessary to fulfill this obligation and/or technical knowledge or experience needed to make such a professional decision, and therefore failed to make the proper distinction.

Failure to Comply With Paragraph 4.4

According to State regulations, during the Preliminary Assessment, the Industrial Hygienist shall identify the manufacturing process used on site. The information is imperative and indispensable during the Preliminary Assessment, since the decontamination efforts may be incumbent on the type of process used. Furthermore, the post decontamination sampling shall be incumbent on the type of process used. The state regulations explicitly require the Industrial Hygienist to:

4.4. Identification of manufacturing methods based on observations and law enforcement reports.

Inherent in this requirement is the presumption that the consultant would be capable of actually having some knowledge of manufacturing processes, and some training which would allow the recognition of observations to be linked to some kinds of manufacturing.



As already stated, there is no documentation that indicates that the work was performed an Industrial Hygienist, but rather, the work was performed by a mysterious “John Carlisle” for whom no information is provided. As it is, Mr. Carlisle has no documentable training in clandestine drug operations. Therefore, it would be impossible for Mr. Carlisle to be capable of describing the method of manufacturing or chemicals used.

Since TES failed to attempt to obtain law enforcement records as required, TES could not have complied with this provision. Similarly, since TES has no documented knowledge or training of manufacturing processes and TES has otherwise demonstrated gross technical incompetency in clandestine drug lab assessments, there is no reason to expect TES to have sufficient competency in recognizing, or knowing the significance of any such observations to discern which method(s) may have been involved.

State Regulations explicitly require the following:

7.3. If the preliminary assessment indicates the phenyl-2-propanone (P2P) method of methamphetamine manufacturing was used, surface wipe samples for lead shall not exceed a concentration of 40 µg /ft², and vapor samples for mercury shall not exceed a concentration of 1.0 µg /m³.

Therefore, since TES has not determined why the contamination is present, or the type of process that may have been used, their recommended decontamination suggestions may be entirely inappropriate for the property. TES entirely failed to perform its regulatory duties, and entirely failed to grasp the importance of this determination and instead TES falsely states:

However, TES can make no representation as to whether or not the property was at some time the site of clandestine drug activity.

It is difficult to understand how the property could be contaminated with methamphetamine, and yet, TES cannot make a representation as to whether or not the property was at some time the site of clandestine drug activity.

Failure to Comply With Paragraph 4.5

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

4.5. Identification of chemicals used, based on observations, law enforcement reports, and knowledge of manufacturing method(s).

TES entirely failed to perform its professional, regulatory duties by failing to obtain law enforcement documents and determine what chemical may have been used or stored on the property. Since TES failed to attempt to obtain law enforcement records as required, TES could not have complied with this provision.



Failure to Comply With Paragraph 4.6

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

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. 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.

TES failed to perform its duties and fulfill regulatory requirements by failing to identify or recognize signs of contamination. Since, as described later, TES failed to comply with Section 4.14 of the regulations (4.14. Photographic documentation of property conditions, including cooking areas, chemical storage areas, waste disposal areas, and areas of obvious contamination) the mandatory photographs are not available to objectively assess TES's observations.

Failure to Comply With Paragraph 4.7

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

4.7. Identification and documentation of chemical storage areas.

However, since TES failed to determine the availability of law enforcement documents, as required by regulation, TES could not have complied with this section.

Similarly, since the field personnel (Mr. Carlisle or Ms. Granger) have no documented training in the assessment of illegal drug laboratories, there is no reason to believe that either would be capable of recognizing such indicators if present.

Failure to Comply With Paragraph 4.8.

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

4.8. Identification and documentation of waste disposal areas.

In their report, TES states:

Meth production chemicals are often poured down the drain during cooking. Concentrations of the meth chemicals may remain in the traps of sinks and other drains. Volatile organic compounds (VOCs) are often corrosive or flammable. As a result, plumbing in structures may be compromised and require attention during remediation. The plumbing and sanitary sewer showed no signs of stains or etching; known indicators of effluent dumping. No chemical, waste disposal or manufacturing areas were observed. There were also no burn piles outside the property, or signs of exterior effluent dumping.



Curiously, this is exactly the same language that also appears in the fatally flawed Shook Lane report referenced above, and it would appear that TES merely plugs this language into its reports regardless of actual site conditions.

TES failed to comply with Section 4.14 of the regulations (Photographic documentation) and as such there are no photographs available to objectively assess TES's assertions.

Similarly, since the field personnel have no documented training in the assessment of illegal drug laboratories, there is no reason to believe that they would be capable of recognizing such indicators if they were present.

In any event, considering the overt errors, omissions and false representations made in their report, clearly by an assessor with no documented experience or knowledge in performing such work, it is not surprising that TES similarly lacked the knowledge to recognize those signs.

Failure to Comply With Paragraph 4.9.

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

4.9. Identification and documentation of cooking areas.

This is imperative information, where available, since it helps to direct proper decontamination as well as final clearance sampling activities.

Since TES failed to comply with Section 4.14 of the regulations (Photographic documentation) and since the field personnel have no documented training in the assessment of illegal drug laboratories, and since the remainder of the report exhibits gross technical incompetence, there is no reason to believe the on-site individual would be capable of recognizing such areas.

Failure to Comply With Paragraph 4.10.

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

4.10 Identification and documentation of signs of contamination such as staining, etching, fire damage, or outdoor areas of dead vegetation.

If we look at the available aerial photography, we can see extant and historical evidence of dead and stressed vegetation.

Since TES failed to comply with Section 4.14 of the regulations (Photographic documentation), TES would have a difficult time in explaining why recent aerial photography objectively documents dead and stressed vegetation but in their report, TES merely states:



- **Exterior Areas of contamination** (staining, fire damage, dead vegetation outside):__
None Observed

Since TES failed to comply with Section 4.14 of the regulations (Photographic documentation), TES cannot provide any objective documentation that would permit them to affirm the assertion. Since TES failed to provide a documented qualified Industrial Hygienist for the work, there is no reason to believe the field personnel on site would have had the necessary skills to identify signs of contamination.

Failure to Comply With Paragraph 4.11

According to State Regulations, during the Preliminary Assessment, the Industrial Hygienist is required to perform specific duties including:

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

Since TES failed to comply with Section 4.14 of the regulations (Photographic documentation), TES cannot provide any objective documentation that would permit them to affirm the assertion.

Failure to Comply With Paragraph 4.14

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

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

TES failed to meet this responsibility by failing to provide any photographs of any site conditions. In their report, TES provided 28 photographs – 27 of those photographs were close-ups of their sampling templates that provide absolutely no value whatever to an assessment and entirely fail to document site conditions.

Failure to Comply With Section 6.0

The sampling performed by TES was not compliant with State regulations; (and indeed, the vast majority of sampling conducted by TES was both useless, unnecessary and was a waste of financial resources).

State Regulations explicitly provide that:

- 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.

None of the sampling performed by TES met the regulatory requirements for such sampling. According to Colorado Regulations:



Violation of Section 6.2.1 Prohibited Sampling Technique

Mandatory Colorado regulations require:

6.2.2. Composite sampling may only be conducted in situations where contamination is expected to be relatively evenly dispersed throughout a given area, and composite sampling will provide an accurate representation of the area sampled, as described in Appendix A.

A legitimate Industrial Hygienist, trained in the aspects of illegal drug laboratory assessments would have known that contamination under these circumstances exhibits very large sampling error. A legitimate Industrial Hygienist would have known that field data from fully characterized properties exhibit a lognormal distribution (large variations of concentration). That is, the contamination under the circumstances of the subject property will never be "...expected to be relatively evenly dispersed throughout a given area..." and the geometric standard deviations can be as large as 3.0. This distribution is similar to that reported elsewhere.^{5, 6}

Indeed, if we simply look at the TES data, we see exactly the type of lognormal variation expected; the geometric standard deviation of the TES data is 5.3 and the concentrations reported by TES have a Shapiro-Wilks W-Test one-tailed percentage point of 0.8180; the normal (Gaussian) W-Test is only 0.7981 whereas the lognormal W-test is 0.8488 indicating that the Gaussian distribution is REJECTED and the lognormal distribution is the better fit, and therefore, the houses could not have been "...expected to be relatively evenly dispersed throughout a given area..." and composite sampling was prohibited.

A legitimate Industrial Hygienist would have known this and would have known that the composite sampling employed by TES was prohibited by state regulations for this very reason. However since TES entirely failed to provide a trained, qualified Industrial Hygienist for this assessment, TES not only violated State regulations by using prohibited sampling techniques, they exhibited a lack of knowledge in the basic practice of the science of Industrial Hygiene.

Violation of Appendix A: Prohibited Locations

According to Colorado Regulations:

Pre-decontamination sampling

In pre-decontamination sampling, the assumption (hypothesis) is made that the area is clean i.e. "compliant," and data will be collected to find support for the hypothesis. Data (such as samples) are collected to "prove" the area is compliant. Sampling, if it is performed, is conducted in the areas with the highest probability of containing the highest possible concentrations of contaminants.

⁵ Washington State Department of Health: Summary Results from a Pilot Study to Evaluate Variability and Distribution of Methamphetamine Residue in Remediated Residential Illegal Drug Labs, as reported in NIOSH Method 9106 (DRAFT)

⁶ Martyny JW, Arbuckle SL, McCammon CS, Esswein EJ, Erb N, *Chemical Exposures Associated with clandestine Methamphetamine Laboratories*, (http://www.njc.org/pdf/chemical_exposures.pdf , May 10, 2004).



For this property, not only did TES use a prohibited sampling technique (composite sampling), but TES also collected samples from locations expected to have the lowest probability of contamination.

Since TES lacks any documentable knowledge of clandestine drug lab assessments, and their work exhibits a lack of knowledge in basic Industrial Hygiene sampling theory, TES has demonstrated they lack any knowledge of the thermophoretic mechanisms involved in contamination migration and deposition. It is precisely for this reason TES has collected samples from inappropriate surfaces (ignoring the fact that TES collected prohibited composites that included prohibited porous surfaces).

Thus for example, TES collected samples primarily from 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.

Violation of Appendix A: Mandatory Sampling Theory

According to Colorado's mandatory sampling protocols, the Industrial Hygienist is required to follow the specified 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.

Instead, of using the mandatory authoritative biased judgmental sampling theory, TES appears to have collected willy-nilly grab samples with no rational basis for the selection of the areas, and with complete disregard for the regulations.

Violation of 6.1.2 Failure to Address Ventilation System

According to mandatory regulations, when samples are collected during the Preliminary Assessment, they must be collected from:

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

The Industrial Hygienist must either challenge the compliance status of the ventilation system or presume the system is contaminated. In this case, TES did neither and entirely failed to address the ventilation system.



Failure to Comply With Paragraph 6.1

State regulations require that 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

TES failed obtain law enforcement documents which may have spoken to the issue of cooking, disposal and storage areas. TES entirely failed to demonstrate any technical ability to properly assess an illegal drug laboratory, and therefore, TES failed to identify such areas. Therefore, TES could not have complied with this section.

Failure to Comply With Section 8

State Regulation 6 CCR 1014-3 contains several required elements to be included in the final documentation at the end of a project. Many of those elements that must be included in the final documentation must necessarily come from the Industrial Hygienist performing the Preliminary Assessment otherwise there is no way the information is available for inclusion in the final documentation. Specifically, information for the following sections must be included in the Preliminary Assessment documentation, or they are not available for inclusion in the final documentation:

- Section §8.11
- Section §8.12
- Section §8.13
- Section §8.14
- Section §8.20
- Section §8.21
- Section §8.22
- Section §8.23

Failure to Comply With Paragraph 8.14

According to State Regulations, the Industrial Hygienist is required to provide specific information to be included in the final document including:

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

Nowhere in the TES report, do we find the information as required by State regulations.

Failure to Comply With Paragraph 8.20

According to State Regulations, the Industrial Hygienist is required to provide specific information to be included in the final document 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.

Nowhere in the TES report, do we find the photographs as required by State regulations.



Failure to Comply With Paragraph 8.21

According to State Regulations, the Industrial Hygienist is required to provide specific information to be included in the final document including:

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.

As already stated, nowhere in the TES documentation is there any indication that any individual used on this project is A) An Industrial Hygienist, B) in possession of any training, skill or experience of illegal drug laboratory assessment. As an example of a typical statement of qualifications, I have attached my SOQ to this letter.

Failure to Comply With Paragraph 8.22

According to State Regulations, the Industrial Hygienist is required to provide specific information to be included in the final document including:

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

In the preceding document, FACTs has identified scores of deviations from standard practices, and yet not a single one of these deviations has been identified by TES in their report, as required by regulations.

Furthermore, TES has represented, the following statement as a certification:

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.

Unless TES can actually document that the field personnel was an Industrial Hygienist as required, we consider the following:



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

During the last few years, Colorado has seen a rash of fraudulent, unlawful and grossly incompetent meth-lab assessments. The problems these individuals have caused has become so serious and so many Colorado citizens have been injured by the incompetent and fraudulent work by these individuals, that a new Bill was introduced into the Colorado Senate by Senator Louis Tochtrop (SB 13-219). That new Bill will impose heavy fines (\$15,000 per day) on individuals perpetrating these fraudulent activities and regulatory misconduct. However, until the Bill is passed, fraudulent and incompetent firms continue to create serious problems in Colorado.

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 deviating from mandatory State requirements.

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

However, TES has specifically referenced 6 CCR 1014-3 and specifically referenced CRS 24-30-1402 when they stated:

Pre-assessment sampling was conducted by a qualified industrial hygienist as defined in § 24-30-1402, C.R.S. Sampling was conducted in accordance with the Colorado Department of Public Health & Environment 6 CCR 1014-3 Regulations Pertaining to the Cleanup of Methamphetamine Laboratories and was based on the professional judgment of the industrial hygienist.

Therefore, TES apparently knowingly and willingly performed work that deviated from mandatory State requirements.

According to Colorado Revised Statute §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, elements of the “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 the statutes, and therefore, establish the fact that they are aware of such recording.

Colorado Criminal Code CRS 18-5-113. Criminal impersonation

Ms. Granger has performed at least on other unlawful drug assessment work in Colorado purporting to be in compliance with State regulations; work that was shown to be in gross violation of those regulations. In that work as well as in this, Ms. Granger has held herself out to be an Industrial Hygienist.

There is nothing provided in the documentation that would indicate that any of the TES individuals involved in this property were in fact Industrial Hygienists meeting the State definition.

There was nothing provided in the TES report that documented any of the personnel were qualified to perform the work or sign the affidavit in lieu of a legitimate Industrial Hygienist and there is no Statement of Qualifications for any of the field personnel as required by regulation. The incompetence demonstrated in this report is sufficient to demonstrate that Ms. Granger is NOT an Industrial Hygienist and is NOT competent to perform the work and may be falsely representing herself as an Industrial Hygienist.

Colorado Case law defines criminal impersonation as knowingly assuming a false or fictitious identity or capacity, and in that identity or capacity, doing any act with intent to unlawfully gain a benefit or injure or defraud another (*People v. Brown*, 193 Colo. 120, 562 P.2d 754 (1977); *People v. Borrego*, 738 P.2d 59 (Colo. App. 1987)). To falsely impersonate means to pretend to be a particular person without lawful authority (*People v. Horkans*, 109 Colo. 177, 123 P.2d 824 (1942); and to perform an act in assumed character for benefit. It is an offense under the code to falsely impersonate another, and in such assumed character to do any act whereby any benefit might accrue to the offender or to another person. (*People v. Horkans*, 109 Colo. 177, 123 P.2d 824 (1942)). Venue is not an element of the crime of criminal impersonation (*People v. Perez*, 129 P.3d 1090 (Colo. App. 2005)). Although the code does not require two overt acts to be committed, (rather the code requires assuming a false identity and doing an act with the intent to gain a benefit (*People v. Johnson*, 30 P.3d 718 (Colo. App. 2000))), Ms. Granger has repeatedly performed these acts. The requisite intent to gain a benefit may be inferred from the accused's knowing use of a false identity and the acknowledged intent to secure some advantage from the impersonation (*People v. Borrego*, 738 P.2d 59 (Colo. App. 1987)). The common meaning of "assumes a false or fictitious identity" is not to hold oneself out as someone that he or she is not; it requires the assumption of the identity of another person, whether that other person is real or fictitious (*People v. Jones*, 841 P.2d 372 (Colo. App. 1992)). For example, an attorney with a suspended license who continues to practice law is guilty of criminal impersonation for practicing law. The courts have held that "continuing to represent himself as an attorney and performing legal work when he was aware that he had no valid license to do so amounts to the assumption of a false or fictitious capacity for purposes of the criminal impersonation statute." (*People v. Bauer*, 80 P.3d 896 (Colo. App. 2003)).



We recommend that the situation be forwarded to the District Attorney for proper evaluation, and to determine if this case rises to the level of criminal conduct.

We also recommend the Governing Body perform an historical review of all other assessments performed by this organization to determine if similar violations have occurred.

Potential Conflict of Interest

According to Colorado regulations:

6.7. To prevent any real or potential conflicts of interest, consultants conducting preliminary assessments and post-cleanup assessments must be independent of the company or entity that will subsequently conduct the drug lab cleanup, except as provided in 6.7.1

And the regulations indicate that “independent” means:

“Independent” means that a person is not an employee, agent, representative, partner, joint venturer, shareholder, or parent or subsidiary company of another person.

In this particular case, the company involved, Titan Environmental Services has not conducted a Preliminary Assessment, however, they have included a proposal for the remediation services, which, if hired, would be a violation of 6 CCR 1014-3 §6.7.

We note from their web site (<http://www.titankc.com/>) that TES is not an Industrial Hygiene firm, but rather, primarily a remediation company, which partially explains why TES has exhibited such technical incompetence in Industrial Hygiene matters.

CONCLUSIONS

- No Preliminary Assessment has been performed at 5571 E. 66th Way Commerce City, CO 80022 as required by regulation.
- Remediation activities at the property are prohibited until the completion of the mandatory Preliminary Assessment.
- No documented Industrial Hygienist has been employed for this property.





**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:	5571 E. 66th Way	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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