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# *Endangering Human Life and the Environment*

## *A Sentencing Hearing Potential*

The vast majority of clandestine meth lab cases result in a guilty plea. In the course of probation and parole's pre-sentencing investigation, very often the "endangering human life and the environment" enhancement appears. In this document, I will discuss this enhancement and the approaches that can be taken in sentencing hearing preparation.

In a telephonic hearing I participated in the sentencing hearing of a Des Moines, IA case. The government called an clandestine lab investigator as its expert, one who had not been to the scene but how had reviewed the reports, photographs and lab reports, the same process that is used in my evaluations. This investigator's testimony was along the same line as I have heard before – discussing the various hazards associated with the items found at the lab scene. The following is a synopsis of his testimony regarding clandestine lab hazards.

Ether: The investigator testified one can of ether was equivalent to one stick of dynamite, the chemical is extremely flammable and in the course of one investigation, he inhaled the fumes from less than ½ gallon of ether which resulted in his falling asleep 4-5 hours later. The symptoms continued and he was diagnosed with a "temporary chemical induced hepatitis" due this exposure.

Anhydrous Ammonia: The investigator opined that anhydrous ammonia is a very dangerous compound. For each degree in temperature rise the increase in pressure inside the LP gas container would be 150 pounds. Since the one LP container was found in a freezer, he opined the elevation from freezer temperature to room temperature could result in such an increase in pressure as to cause the tank to explode. He also opined the pressure relief valves on gas container were affected by the anhydrous rendering them ineffective. Finally he opined that with the introduction of air or water, the anhydrous could also explode.

Lithium: It was the agent's testimony that lithium reacts violently with any water and is an explosive risk. He further testified that he viewed videos in training that show this type of reaction. The agent also testified that if any water was introduced to the reaction mixture any lithium present could cause a violent reaction up to and including explosion.

**Hydrogen Chloride Gas**: The agent testified that the hydrogen chloride gas is dangerous. It can be toxic at 100 parts per million and fatal at levels in excess of 1500 parts per million. He testified that is an extreme inhalation/skin contact danger.

**Sludge from Synthesis:** In this case the agent talked about the hazards from this material, briefly covering disposal and environmental dangers.

**Pseudoephedrine**: This was a surprise in his testimony. The agent testified to the inhalation issues regarding breathing this powder into the lungs.

## "Potential" versus "Real" Dangers

All methamphetamine labs bear "potential" dangers. They involve chemical reactions, solvents, gas and substances that when mixed will generate heat. The agent's testimony related to what "could" occur in these environments. I could not disagree with the various potential dangers associated with these items; however there is more to this assessment than citing "what ifs"

When there is talk about endangering keeping some form of perspective is required. Driving a motor vehicle involves "potential" dangers that become "real" when someone runs a stop light, stop sign or fails to yield. Cutting one's grass bears "potential" danger from thrown rocks or stepping on glass or into holes in the lawn. In essence we live in a world of "potential" dangers in just about everything we do.

When conducting an assessment for endangerment, I look for any documentation or photograph that bears evidence the "potential" has been elevated to "real." For example, seeing an ash tray and cigarette butts next to a can of ether would be considered a "real" danger. Uncapped jars whose solvents have been identified as "ether", "acetone" or other similar compound can elevate the danger to real especially if they are near a heat source.

Understanding the methodology can be of great assistance if the defendant is one of those "talkative" sorts. Reading his or her statement can offer a great deal of benefit into the process used in the reduction of pseudoephedrine to meth. In most cases, however, this type of "recipe" related information is not present.

Photographs and/or videos can provide a wealth of information regarding the assessment. It provides one with an understanding of the purported lab area. For example a clandestine lab in a kitchen with an older model gas stove which bears a pilot light is a clue that something bad could happen. A photograph of a microwave oven bearing an aluminum pie tin with

powder and liquid, the liquid in which has been identified as ether is, in my opinion, a pre-launch photograph. A photograph of capped mason jars with powder and liquids, even if the liquid is ether, acetone or coleman fuel can be deemed a "potential" rather than "real" danger.

In my opinion, there must be, **identifiable** and **demonstrated** evidences present at a scene before any opinion, within a reasonable degree of scientific certainty, regarding dangers can be expressed. Testimony regarding what dangers *could* be present is, in my opinion, speculation and conjecture.

So, did this site bear evidence of endangering or substantial risk to human life or the environment? In my opinion, I found no such evidence.

1. The very first unusual thing about this case was the report by the officer who detected the ether odor in his patrol car, windows rolled up, in such a concentration to make his eyes water. While the odor of ether can be detected in low concentration, the manifestation of physical effects requires a much higher dose of the chemical. There was no information regarding to wind direction, temperature, humidity or distance from the garage to the roadway where the officer detected this odor. These are important and critical pieces of information. At some distance, on a windy day, the odor of ether would dissipate rather quickly, provided the wind was in the right direction to send it towards the roadway.

2. Thirty minutes later, there was no odor of ether detected by another police officer.

3. As the officers began to execute the search warrant, there was no mention in any of the reports regarding detecting any chemical odors or the odor of ether.

4. There were three 20# LP gas cylinders present in the garage, one in a freezer, one near the garage door and one in a trunk of a vehicle. All three had the bluish discoloration to the valves. The cylinder in the trunk had the valve in the open position and if anhydrous had been present, the ammonia odor would still be strong in that garage. No mention of such was reported.

5. There were evidences of fans in the area of the lab. The investigator who testified at the hearing was unaware as to whether any of these fans were on at the time of the investigation.

6. Only two of the jars could be identified as receiving lab analysis. Both liquids in the jars were identified as "ether" and both these jars were shown to be capped.

7. On the law enforcement laboratory assessment form, air monitoring was checked as not being done. When faced with what could be considered dangerous levels of solvents, investigators can use a VOC – volatile organic vapor detector which will take air samples and report their concentration. Since this was not conducted, there is no means to accurately estimate or opinion on the air quality inside that site. The information by the investigator regarding the parts per million data of no probative value.

8. There was a gas generator shown in the photographs. There was no information either photographically or in the police reports the generator was still active at the time of the investigation.

The above listed items were the crux of my testimony. From the photographs I found no evidence that suggested the "potential" dangers would be considered "real" or posed a significant hazard to human life. It is my understanding the judge in this case stated that he has to find more than just the inherent dangers of a meth lab because the guideline is written to say that the defendant has to be manufacturing meth AND there is a substantial risk, indicating that the meth lab in and of itself is not enough of a risk. He agreed with the defense argument and did not impose this enhancement.

Please do not get me wrong, I have conducted numerous reviews for endangering and have been able to pinpoint exactly what "real" dangers existed and why.

The first key to understanding these kinds of appraisals is to recognize meth labs can be dangerous. We read in the papers or see on television fire fighters extinguishing flames from clandestine labs. The varieties of solvents that are found at these scenes are all flammable and any heat source can be the spark to be the highlight of the nightly news.

The second key to the endangerment issue is the determination of whether the assessment was objectively made or is based upon "speculation" on the part of the assessor of what could occur – back to the "potential" versus "real" dangers. In the scientific community "speculation" plays no role in the finding of facts or causes.

If you feel your case is going to involve the latter type of testimony, the third key in the endangerment saga comes into play – an assessment by your own expert. I would encourage you to find someone with a science background, familiar with the various conversion methods and their associated evidence and who can derive their opinion based upon tangible evidence that demonstrates the difference between "potential" and "real" dangers at the particular scene. I cannot stress strongly enough, no two meth labs are alike and even though there may be similarities between methods, the "potential" and "real" dangers can be strikingly different.

I wish there was a means by which I was able to provide you with a “check list”, if you will, of things that can be encountered that could be used as a reference guide regarding endangering issues, both for human life and the environment. In over 400 cases or so I can state each lab is investigated differently, each agency has clan lab protocols which are not always the same as others and the extent of the investigations can be highly diverse in exactly what the investigators will do – fingerprinting and air/soil sampling – to name a few.

It is my hope that the use of these “case reports” offer some assistance as you prepare your case for trial or for sentencing hearings in which endangering human life and/or the environment issues will be presented. If you have any questions or comments, please feel free to contact me.

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