

Questions & Answers from April 2012 IBI Biochar Guidelines Webinars

Note: Most questions were answered during the post webinar Q&A sessions, however, only a few of the answers were recorded. This document captures most of the questions and some of the answers.

Q: Are there any instances in the literature of dioxins or PCBs being detected in materials intended as biochars - the only data I find is the ash from the incineration of MSW, which is far removed from Biochar production, although the ash from incinerators would qualify as Biochar in this standard. It seems like biochar has become a dumping grounds for existing wastestreams that were previously landfilled as hazardous wastes - maybe they should be excluded right up front.

A: Yes, there are examples of dioxins found in biochar materials. It is possible for dioxin to be produced from clean feedstocks during certain processing conditions. See the IBI White Paper, [Implications and Risks of Potential Dioxin Presence in Biochar](#).

Q: Are wood pallets considered unprocessed or processed feedstocks? What if they have binders in them?

A: If they have binders in them, they would be considered to be processed feedstocks.

Q: Can you mention that both these standards certification and sustainability will be much discussed at the USBI Conference ?

Q: Can you please advise how a biochar producer might go about labelling biochar that is produced from urban lop, that will have come from a variety of sources where soil conditions, such as toxicity, are unknown? Thank you.

A: Please see Appendix 4 of the Biochar Standards, Determining a Material Change in Feedstock.

Q: Can you please re-review the definition of "contaminant"?

A: Contaminants are non-biomass materials such as metal, glass or plastic. They may not include any hazardous waste.

Q: do want inoculated or non inoculated test

Q: How can we begin to comply with the guidelines before labs are identified?

Q: I have customers and clients asking whether they need to comply with these standards in the near term: are the standards intended to have any practical effect before the certification process is in place?

Q: I see that there was no mention of adsorption capacity, in the guidelines, as a characteristic of biochar, whereas a lot has been written about this as an important feature, eg, ""The Biochar Revolution"". Can you comment please.

Q: in colorado we are selling inoculated char, do we use the same cert. process?

Q: In the event of an adoption of a global carbon market that recognizes biochar as a carbon sequestration technique, will there be a one page set of instructions accessible by(small scale - many numbered) farmers capable of processing biomass in one ton per week lots , that would enable monetizable participation

Q: It seems the questions of material change go to the fact that there is no timeframe on the requirement. With a continuous feed process is it an average over the year? Average over the day?

Q: Let say I produce biochar in a forest region. I may have soft wood, hard wood, different humidity levels depending on the season. Concretely, how will my labelling be done, how often will I have to test it with professionals, during a year for example? I don't see the practicality yet, and some investors might look at that closely.

Q: On the "Material Change for Feedstock" rule, how would you manage a situation where feedstock is variable such as municiple green waste. It would be impractical to test every day.

Q: On the slide that defines ""Diluent"" you should use the term ""soil"" not ""dirt""

Q: Some of the heavy metal toxicants listed are also micro nutrients for plants, ie zn, cu why?

Q: Porosity and surface area are crude measures giving little indication of how much of a given chemical would be absorbed. And as for producers adding added info voluntarily, would they really add negative info? A question should be included asking for data on this topic which if unavailable should be stated.

Q: The definintion of "biochar" is descriptive, but it is not exclusive. It describes many substances that I would certainly not consider to be biochar, such as particulate emissions. condensed tars and even torrefied wood. Why is the defiintion not more specific?

Q: The definintion of P15 "biochar" is descriptive, but it is not exclusive. It describes many substances that I would certainly not consider to be biochar, such as particulate emissions. condensed tars and even torrefied wood. Why is the defiintion not more specific?

Q: the definition of organic carbon seems to distinguish well between the basic elemental carbon and organic compounds, but the test criteria itself in category A seems to include the elementa/black carbon itself in "Organic Carbon" Can you sort this out?

Q: The discalimer says that IBI does not make any comments or characterization of any particualr char, either tested or untested. But won't the certification process be exactly that. a representatin by IBI of the character and fitness of tested char?

Q: The list of biochar properties still excludes herbicide absorption which I raised in the last webinar. This is quite different from toxicity but is highly significant to farmers. In some cases it could be a show-stopper. We ignore it at our peril.

Q: There are hundres oa PAHs that may trun up in a pyrolysis process, but very few of these are toxic. Whhy is a test required that does not distinguish between toxics and others

A: The test for PAH that is specified in the Biochar Standards measures only those PAH compounds that are considered to be toxic.

Q: what are the estimated costs for categories A and B?

Q: what are the plans for auditing or assuring that what biochar producers claim is actually true?

Q: What plans does the IBI have to draw these Guidelines to the attention of national and supernational authorities (such as the EU) so as to seek their official recognition and support?

Q: when can start sending test ,to you

Q: Why addition of EC test? Producers are not equipped like academics. Also the long list of toxic compounds to be tested will prove to be too expensive to perform by most producers. This is because processed biomass is included among acceptable biochar!

A: EC is an optional test. Producers only include it if they wish to.

Q: WHY is there no test recommende for activity/adsorption? Is surface area and porosity a proxy for adsorption?

Q: Why was the distinction between small and large prodeucers eliminated?

A: There never was a distinction in these Biochar Standards between small and large producers.

Q: Why were USCC/USDA test methods used instead of more relevant EPA test methods?

A: Some test methods are EPA methods.

Q: will IBI provide an online list of laboratories that claim to provide biochar analysis services that comply with the IBI guidelines?

Q: Will there be a regular process for amendment of the standards after adoption?

Q: You may want to look again at the definitin of "Organic carbon" I definitely read this as applying to biodegradeable compounds only: "Biologically degradable carbon-2 fraction of biochar feedstocks."containing compounds found in the organic

Q: You state that the tests required for certification are intended to be "affordable". Do you have an estimated cost range for certifying biochars.

Q: pg. 22 sample label - P is listed as percentage when referring to Total then as mg/kg as Available. This may be confusing, especially when P content in fertilizers is listed as % P2O5.

Q: Again sorry for not having done my homework - but is there plenty to know about "field capacity" (water holding)?

Q: Any chance you can summarize these Q&As somewhere?

Q: Arer sustainability guidelines your next task?

Q: Can you send us a copy of the powerpoint presentation or is it available on line? I have had trouble viewing due to internet issues.

Q: Does the testing check for radon?

Q: How is it anticipated that the certification will work?

Q: I may be way ahead of myself here, but will there be standards for biochar use for remediation of contaminated soils in the future?

Q: If you will have a database with all of the various characteristics of the different biochars out there.

Q: is it possible to produce biochar from wood pellets stove??? at household level??

Q: Is there a paper that contrast the IBI & EU standards?

Q: Just gone (scanned) through the guideline. When passed will it be a binding tool for all countries??? Just my curiosity.

Q: Skimming through briefly I tried to find the definition of "ash". Is "ash" assumed to be synonymous with Potassium, or all minerals?

Q: Sorry for joining late. If not already discussed - anything new on likely costs for applicants?

Q: There is currently a voluntary field for members to state ""biochar seller"" in their online member directory profiles. You can give this info now.

Q: Will biochar nutrient concentration standards be broken down by class (ie. P, K, Ca, Mg) or just toxicity levels?

Q: Will biochar standards eventually be related to soil type? Meaning, will a biochar with specific characteristics be recommended for particular soil types?

Q: Will you have a database of all the available biochars from commercial producers available to members?