

APPENDIX III

CRITERIA FOR SPECIFYING CLAIMS

Applicants to the NJCAT Technology Verification Program should use the following criteria for specifying claims about their technology.

1. **A claim must be specific.**
 - A claim must clearly specify the minimum performance that is achievable with the technology, and not simply the maximum performance. For example, an unacceptable claim would state that a technology reduces contaminant emissions by *up to x%*, while an acceptable claim would state that a technology reduces contaminant emissions by *at least y%*.
 - A claim must clearly specify the conditions under which the claim is applicable.
 - Claims may not use relative or comparative terms such as “better than” or “superior to”.
 - A comparative term such as “improves” is an acceptable expression if the term is used to describe an advancement of the proponent’s own technology and if the proponent has suitable data for both the baseline conditions (prior to improvement) and the improved version.
2. **A claim must be measurable.**
 - A claim must be measurable using acceptable test procedures and analytical techniques.
3. **A claim must be verifiable.**
 - A claim must be verifiable using acceptable test procedures and analytical techniques.

Examples of typical claims that could be verified are:

1. **Contaminant removal/recovery:** a claim specifies that a technology removes/recovers at least 95% of the contaminant from specified matrices (air, liquid, solid) with specified initial contaminant concentrations. This claim could be verified by providing data on the amount of the contaminant removed/recovered by the technology to the total amount of contaminant treated by the technology.
2. **Contaminant destruction (conversion):** a claim specifies that a technology destroys [PCBs] in a PCB-bearing solution (maximum concentration specified) to a maximum effluent concentration of [0.01 mg/l] under specified operating conditions. This claim could be verified by providing data on PCB concentrations in the solution and the effluent.
3. **Effluent/emission characteristics:** a claim specifies that an air pollution control device has an efficiency of 99% in reducing the emissions of particulate matter from a process, under specified operating conditions. This claim could be verified by providing data on the total mass of particulate matter at the inlet and outlet of the control device over a period of time, to allow a mass balance for the system to be calculated.
5. **Process characteristics:** a claim specifies that a process created to support (quantify/characterize) environmental management or restoration (remediation) performs in a specified manner that is based on sound engineering and scientific principles.
6. **Measurement/monitoring equipment:** a claim specifies that measurement/monitoring equipment can provide quantifiable measurements with a specified accuracy and/or precision and/or efficiency in a specified matrix.
7. **Capture Efficiency:** a claim that a particular renewable energy related technology (ie. solar,

pv, fuel cell) will capture and convert a particular renewable resource with XXX% efficiency.