### Green Frac Additive Scorecard

For all responses, Yes=1, No=0

1. Does the product contain any ingredient listed as an Extremely Hazardous Substance in Section 302 of the Emergency Planning and Community Right to Know Act (EPCRA)? (Please reference [www.epa.gov/ceppo/pubs/title3.pdf](http://www.epa.gov/ceppo/pubs/title3.pdf))

2. Does the product contain any ingredient listed as a Toxic Chemical in Section 313 of the Emergency Planning and Community Right To Know Act (EPCRA)? (Please use reference from #1 above)

3. Does the product contain any ingredient listed as a Priority Pollutant under the Clean Water Act? (Please reference tab below labeled “Priority Pollutants”)

4. Does the product contain any ingredient listed by the EPA as a Persistent Bioaccumulative Toxin? (Please reference tab below labeled “PBT”)

5. Does the product contain any ingredient listed as a known carcinogen by the International Agency on the Research of Cancer, the US EPA (Group A and B1) or the National Toxicology Program? (Please reference tab below labeled "Carcinogens”)

6. Does either the primary or secondary DOT Hazard description include the word "Toxic" or the phrase "Environmentally Hazardous Substance"?

7. Biodegradability - Is the product <20% biodegradable AND either <70% biodegradable in 28 days (OECD 301A or 301E) OR <60% biodegradable in 28 days (OECD 301B, 301C, 301D, 301F, 302B or 306)? (Note - Inorganic compounds will be excluded from this requirement and will be scored as a zero)

8. Bioaccumulation - Does the product have a bioaccumulation value of log Pow >3?

9. Toxicity - Does the product have an aquatic toxicity <10 mg/L (LC-50 or EC-50)? (Please reference species and note on tab below labeled "Aquatic Species”)

10. Does the product contain any ingredient in a concentration during use sufficient to cause it to be listed as a Contaminant under the Safe Drinking Water Act? (Please reference [www.epa.gov/safewater/contaminants/index.html](http://www.epa.gov/safewater/contaminants/index.html))

11. Does the product contain any ingredient listed as a Hazardous Air Pollutant by the EPA? (Please reference [http://www.epa.gov/ttn/atw/188polls.html](http://www.epa.gov/ttn/atw/188polls.html))

12. Does the product contain an ingredient that is listed as a confirmed endocrine disruptor by The Endocrine Society, the National Institute for Environmental Health or the International Programme on Chemical Safety? (Please reference tab below labeled "End. Disruptors”)

13. Does the product contain an ingredient that is considered a developmental or reproductive toxin according to the State of California’s Proposition 65? (Please reference tab below labeled “Devel. / Reprod.”)

14. Does the material safety data sheet for this product indicate that it is a Delayed (Chronic) Health Hazard?

Sum