ATTACHMENT B

OUTLINE OF DR. BEYER'S FAILURES TO FOLLOW ACCEPTED PRINCIPLES AND METHODS OF ECONOMIC SCIENCE

This outline provides a guide to Dr. Beyer's numerous failures to follow generally accepted economic principles and methods in formulating his opinions, including that class-wide impact can be shown by common proof. Dr. Beyer's various assertions are set forth with summaries of how these assertions do not reflect established economic principles or are untested using established economic methods, or both, with citations to Professor Hausman's, Professor Umbeck's, and Professor Marshall's reports.

- A. Dr. Beyer's assertion no supplier was able to gain a price premium based on branding. (Beyer Rep. ¶ 21.) The scientific test for this assertion is to look at the actual sales data. (Umbeck Rep. 4-11; Marshall Rep. ¶ 48.) Although Dr. Beyer ultimately claimed he did this using his Figures 8-11, those graphs hide, through the use of a price index, the price premium Builders and IMI did receive for similar products. (Umbeck Rep. 4-11.) There was no scientific reason to use an index; when looking for price differences index masks those differences. (Umbeck Rep. 7, fn. 7, Appendix III.) The graphs with the indexing removed disprove Dr. Beyer's theory. (Umbeck Rep. 5-7, 32-34.)
 - 1) Dr. Beyer's assertion that Ready-Mix Concrete is undifferentiated, interchangeable product. (Beyer Rep. ¶ 10) This is refuted by the actual, unindexed price data. (Umbeck Dr. Beyer also ignores substantial evidence, Rep. 11.) including from the named plaintiffs, that "ready-mixed concrete includes" a substantial "delivered package with a large service component" that includes as timing of delivery, number and location of plants, availability of credit, the availability of union delivery drivers, quality, quality control, etc. (Umbeck Rep. 11-12; Marshall Rep. ¶ 31, 33, 36.) Dr. Beyer also ignores the fact that not every producer can or will produce every product. (Umbeck Rep. 15-16; Marshall Rep. These non-price factors often influence ¶¶ 38, 41-46.) purchasing decisions more than price. (Umbeck Rep. 4-13, App. III, IV; Marshall Rep. ¶ 35-36.)
 - 2) <u>Dr. Beyer's assertion that defendants purchased ready-mix</u> concrete from each other shows an undifferentiated product.

- (Beyer Rep. ¶ 25.) This assertion mis-identifies the product under generally accepted economic principles. (Umbeck Rep. 14-15.) Ready-mixed Concrete is a delivered product. Defendants, on a few occasions, bought the ingredients for certain mixes of concrete from each other at the plant. Without knowing which mixes were purchased, one cannot generalize that all ready-mixed is interchangeable. (Umbeck Rep. 14-15.)
- 3) Dr. Beyer's assertion that all defendants had the capability to readily adjust production of varieties of ready-mix concrete as prices rise and fall indicates an undifferentiated product. (Beyer ¶¶ 27-28.). Dr. Beyer did no economic analysis of different supplier's capacity to make such adjustments or the costs associated with making such adjustments as required by economic principles and methods. (Umbeck Rep. 15-16.) Dr. Beyer's assertion also ignores the facts. For example, testimony from the smaller suppliers such as Beaver and Carmel established that they did not have the capacity and would not incur the costs to adjust their plants to be able to service any project. (Umbeck Rep. 15-16.)
- 4) Dr. Beyer's assertion that defendants sold ready-mix throughout the Central Indiana Area indicates an undifferentiated product. (Beyer Rep. ¶ 10.) Dr. Beyer did no economic analysis on this point and ignores contrary testimony from the producers and the named plaintiffs. (Umbeck Rep. 16-18; Marshall Rep. ¶¶ 21-22.)
- B. Dr. Beyer's assertion that defendants jointly had market power. (Beyer Report ¶¶ 33-47.) Dr. Beyer did not do the analyses required by economics to determine the antitrust markets. He merely assumed the product and geographic markets put forward by the plaintiffs. (Hausman Rep. ¶¶ 29-31; Umbeck Rep. 19; Marshall Rep. ¶ 43.)¶
 - 1) Dr. Beyer's assertion (assumption) that ready mix concrete is the relevant product market. (Beyer Rep. ¶¶ 33-47, Beyer dep. 79-81, 92-93.) Dr. Beyer did not perform generally accepted tests to determine the product market. (Umbeck Rep. 19; Marshall Rep. ¶ 43) He merely assumed plaintiffs' allegations.
 - 2) <u>Dr. Beyer's assertion (assumption) that the Central Indiana Area is one geographic market.</u> (Beyer Rep. ¶¶ 33-47; Beyer dep. 77-79, 93, 112-114.) Dr. Beyer accepted the plaintiffs' counsel's allegations as to the geographic market. He did not independently determine a geographic market as required by generally accepted principles and standards of economics and

- he did not perform any of the generally accepted tests to establish the relevant geographic market. (Hausman Rep. ¶¶ 29-32; Umbeck Rep. 19-22, App. V.)
- 3) Dr. Beyer's assertion that "market structure determines to a great extent the conduct of firms in the industry." (Beyer Rep. ¶ 33) This "structure-conduct-performance" paradigm has been "widely rejected" by economists. (Hausman Rep. ¶ 28; Umbeck Rep. 20, fn. 55.)
- 4) Dr. Beyer's assertion that the Ready Mix Concrete industry in Central Indiana is "highly concentrated". (Beyer Rep. ¶ 34). Dr. Beyer did not perform any of the generally accepted tests to determine if this is true. (Hausman Rep. ¶¶ 29-31; Umbeck Rep. 22-24; App. V.C.) In fact, because of the transportation restraints on ready mix, "there is not likely a single market for concrete even in a limited area such as central Indiana. Instead, there are likely a number of separate local markets." (Hausman Rep. ¶ 29; Umbeck Rep. 18-24, App. V.; Marshall Rep. ¶¶ 31-58.) Dr. Beyer's failure to test his concentration hypothesis "leaves him no basis to conclude that there is common evidence to determine whether all or substantially all proposed class members were harmed." (Hausman Rep. ¶ 31.)
 - i. Dr. Beyer's assertion that non-defendant competitors were "fringe participants" and therefore need not be considered. (Beyer Rep. ¶ 35.) "Fringe participant" is not a term recognized in economics. (Umbeck Rep. 23-24, App. V.C.) Dr. Beyer did not scientifically test the competitive significance of non-defendants even though he had the data available. (Hausman Rep. ¶¶ 32-35; Umbeck Rep. 23-24, App. V.C.; Marshall Rep. ¶¶ 43-45.)
- 5) <u>Dr. Beyer's assertion that there were barriers to "de novo" entry in the Central Indiana Area.</u> Dr. Beyer misuses the term "barrier to entry" and ignores economic theory by Dr. Stigler and Judge Posner, which he selectively cites for other propositions. (Umbeck Rep. 25, App. VI.)
- 6) Dr. Beyer's assertion that "for many of its applications, readymix concrete had no close economic substitutes." (Beyer Rep. ¶46.) There are generally accepted tests to see if this is true. Dr. Beyer did not perform any of them. (Hausman Rep. ¶¶ 36-37; Umbeck Rep. 20, 26-27, App. V.B.) In fact, "the economic literature finds that ready-mixed concrete has economic substitutes. Importantly for the class certification question, the

- economic literature find that the type of substitute depends upon the end use to which the ready-mixed concrete would be put." (Hausman Rep. ¶ 37.)
- C. <u>Dr. Beyer's assertion that defendants' annual price announcements indicate their intent to affect all customers.</u> Defendants' alleged intent has no place in an economic analysis of whether there is common proof to show that all customers were *actually* impacted. (Hausman Rep. ¶¶ 25-27.) Whether price announcements had an actual effect is something that can be tested using the transaction data, but Dr. Beyer did not perform those tests. (Hausman Rep. ¶ 27; Umbeck Rep. 27.)
- Dr. Beyer's assertion that he can visualize "price structure" in averaged and indexed price data. "Visualization" of "price structure" on a graph is not a generally accepted scientific test. (Hausman Rep. ¶¶ 19-24; Umbeck Rep. 27-28; Marshall Rep. ¶¶ 14, 22, 30, 77, 80, 84.) Professor. Hausman, Professor Umbeck, and Professor. Marshall all "visually observed" Dr. Beyer's graphs, and came to the opposite conclusion from Dr. Beyer. Prices do not appear to move similarly over time. (Hausman Rep. ¶ 23; Umbeck Rep. 27; Marshall Rep. ¶ 83.) There are generally accepted tests in economics to test if prices move similarly over time, but Dr. Beyer did not do them. (Hausman Rep. ¶ 22; Umbeck Rep. 27-28; Marshall Rep. ¶¶ 85-89.) In fact, when Professor Marshall did those tests, the results showed that prices did not move similarly over time. (Marshall Rep. ¶¶ 80-90, App. D.)
- E. <u>Dr. Beyer's assertion that he can create a regression model to show damages.</u> (Beyer Report ¶¶ 58-71.) Dr. Beyer's report and testimony demonstrate that he is not qualified to create an econometric regression model for damages in this case. His testimony indicates a "surprising ignorance of basic econometrics." (Marshall Rep. fn. 180.) "The construction of reliable but-for transaction prices for ready-mix concrete would have to account for idiosyncratic factors that a common economic framework cannot accommodate." (Marshall Rep. ¶ 106, also ¶¶ 10-11, 16, 19, 24, 27, App. D.)