

THE GULF OIL SPILL AND TALL BUILDING SAFETY

By Richard Schulte

An interesting article from the standpoint of building safety titled "*From the oil spill to the financial crisis, why we don't plan for the worst*" written by Judge Richard A. Posner appeared in the Opinion section of the June 6, 2010 edition of the Washington Post. Judge Posner is a member of the 7th Circuit of U.S. Court of Appeals and is also the author of a book titled "*Catastrophe: Risk and Response*". A few excerpts from this article include the following:

"The BP oil spill in the Gulf of Mexico is the latest of several recent disastrous events for which the country, or the world, was unprepared. Setting aside terrorist attacks, where the element of surprise is part of the plan, that still leaves the Indian Ocean tsunami of 2004, Hurricane Katrina in 2005, the global economic crisis that began in 2008 (and was aggravated by Greece's recent financial collapse) and the earthquake in Haiti in January."

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"Our tendency to procrastinate is aggravated by three additional circumstances: when fixing things after the fact seems like a feasible alternative to preventing disaster in the first place; when the people responsible have a short time horizon; and when the risk is uncertain in the sense that no objective probability can be attached to it."

“The BP oil leak reveals a similar pattern, though not an identical one. One difference is that the companies involved must have known that in the event of an accident on a deepwater rig, prompt and effective remedies for an oil leak would be unlikely -- meaning that there was no reliable alternative to preventing an accident.”

“If deepwater oil drilling had been forbidden or greatly curtailed, the sacrifice of corporate profits and of consumer welfare (which is dependent on low gasoline prices) would have been great.”

“Had the Federal Reserve raised interest rates in the early 2000s rather than lowering them, it might have averted the financial collapse in 2008 and the ensuing global economic crisis. . . Officials bear the political costs of preventive measures but do not receive the rewards.”

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Judge Posner's article is quite interesting in that first he poses a question, *“Why are we so ill prepared for these disasters?”* and then provides an answer to that question. Judge Posner's answer to the question that he poses is two-fold. First, there are so many potential disasters *“that they can't all be addressed without bankrupting the world many times over”* and second, many of the potential disasters *“can't even be anticipated”*.

In the case of one of the disasters that the Judge mentions, Hurricane Katrina, most everyone who lived in the City of New Orleans was well aware of the potential for flooding of the city in the event of a hurricane. Certainly, it was no secret that the levees were required to protect the city from flooding, yet residents of the city ignored the fact that the levees constructed by the Army Corps of Engineers needed to be maintained in order to be effective. The levees were not properly maintained, and the residents of the city really have no one else to blame for the flooding of the city, other than themselves. In short, the Federal Government spend taxpayer's money to prevent the disastrous flooding and the city failed to hold up its end of the bargain by maintaining the protection which was provided.

In the case of the Gulf oil spill, the first question which comes to mind is: why was BP drilling 40 miles off shore in mile deep waters when there are oil deposits on land all over the United States and in shallower waters much closer to shore? While British Petroleum is technically responsible for the spill, the responsibility for BP's inability to staunch the flow of oil also lies with the fact that the locations where oil companies

are permitted to drill are limited by environmental regulations adopted by the United States government. It would appear that the spill would be much easier to deal with had the source of the oil not been 5,000 feet below the surface of the ocean. What we really have here with the Gulf oil spill is just another example of the "law of unintended consequences". In effect, the environmental regulations which the United States has enacted are the root cause of this disaster in the Gulf.

Certainly, just these two examples, the flooding of New Orleans after Hurricane Katrina and the Gulf oil spill, are two good reasons why disaster planning doesn't occur. Much of the money that the Federal Government spent to construct the levees to protect New Orleans was wasted due to inadequate maintenance of the protection and, in the case of the Gulf oil spill, the disaster was, in fact, made worse by regulations designed to protect the pristine environment somewhere else.

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Now, back to the topic of high rise building safety. In its support for more restrictive safety provisions which address the construction of high rise buildings, NIST has argued that, while high rise buildings are “safe”, they are not “safe enough”. In this argument, the terms “safe” and “safe enough” have never been defined. Hence, this allows NIST to make its case by “just waiving its hands” without getting into specifics about what the implementation of its recommendations will actually accomplish. That’s hardly how you would expect such a vaunted scientific organization such as NIST to argue its case, if it actually has a case. Hence, it would seem that NIST really doesn’t have much of a case, but is simply expressing its “feelings” about high rise safety.

If NIST had made the recommendations to increase the level of safety in high rise buildings on September 10th, 2001, rather than post-9/11, the architectural and engineering professions might have more confidence in NIST’s proposals. Given the fact that NIST’s recommendations were made post-9/11 makes it appear that its recommendations are simply an emotional response to the terrorist attacks. Emotional responses to a disaster do not typically generate good regulations.

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As has been noted many times previously, NIST did not provide its rationale for making its recommendations for making high rise buildings “safer” in the investigation reports that were issued, despite NIST’s claims to the contrary. If NIST had done this as it claims, NIST would be able to point to pages in the report where the rationale for each recommendation is provided. Most certainly, NIST’s reports do not contain the rationales for its recommendations in any concise manner, for instance, after each recommendation.

As has also been noted many times previously, NIST has not provided any cost/benefit analysis of its recommendations, either in its investigation reports or in a separate publication. It would seem reasonable that any government agency making recommendations for more restrictive regulations would provide at least some analysis of the cost of implementing its recommendations. The fact that NIST failed to publish any sort of cost/benefit analysis once again appears to be more than a little suspicious. Perhaps NIST did indeed do a cost/benefit analysis on its recommendations and found that the analysis did not provide favorable support for its recommendations. Given the cost of the NIST investigations, there seems to have been more than adequate funding for such an analysis.

Perhaps what is most bothersome about the NIST World Trade Center collapse investigation report, and the recommendations contained in these reports, is the lack of perspective with respect to need to implement NIST's recommendations. Each year, the National Highway Traffic Safety Administration (NHTSA) reports the number of highway fatalities which occur on our nation's roads. Typically, more than 40,000 Americans die annually on our highways compared with no more than 1 or 2 fatalities annually occurring in high rise building fires. (Yes, those statistics are correct.) NIST provides no rationale as to why high rise building safety should take precedence over our efforts to reduce the carnage on our nation's highways. Based upon the statistics, it would seem that common sense would dictate that highway safety should be of far more interest to the American public than high rise building "safety".

In fact, it could be said that the NIST recommendations actually take capital that should be used to reduce the carnage on our highways and reallocates that capital into a frivolous attempt at making already "safe" buildings even "safer". At a time in

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our nation's history when capital is a scarce resource, frivolously wasting capital on high rise building safety is not something that a government agency should be recommending.

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Editor's Note: The author, Richard Schulte, was the recipient of Engineering News-Record's "**Top 25 Newsmakers of 2004**" award and the American Institute of Steel Construction's "**Special Achievement Award**" in 2006 for his commentary on NIST's investigation into the collapse of the World Trade Center towers.

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