### CP

#### Accidents now disprove their arg – no shutdown

Denver Post 12

(8/15, 1 dead, 3 hurt in natural gas well explosion near Fort Lupton, www.denverpost.com/breakingnews/ci\_21319564/injuries-reported-following-natural-gas-explosion-near-fort)

An explosion at an Encana Corp. natural gas well east of U.S. 85 between Platteville and Fort Lupton killed one man and injured three other workers just before 1 p.m. Wednesday. Weld County Sheriff's spokesman Tim Schwartz said the explosion appears to have been related to a pressure issue at the well. "Whatever machinery they were working on, that well head exploded." Schwartz said deputies on the scene saw no fire. "There was no fire to put out. Nothing was scorched." A Flight for Life helicopter responded to the well site near the intersection of Weld County Roads 22 and 31. Medical crews performed CPR on the 60-year-old victim but he could not be revived, Schwartz said. A deputy leaving the scene of the accident Wednesday afternoon said the dead man was from Wyoming. He said two of the workers with minor injuries were taken for treatment in private vehicles. Those people were treated at a hospital and released, company spokeswoman Wendy Wiedenbeck said. The third person was taken to North Colorado Medical Center in Greeley where he still being treated, she said. The dead man and the two workers who had minor injuries were employed by a company contracted to Encana. The worker who is hospitalized is an Encana employee. Encana is investigating the accident, she said. Schwartz said he expects the accident will be investigated by the Occupational Safety and Health Administration. Although Wiedenbeck said the details of the accident are still unclear, she said the Davis well pad is used for directional drilling for oil and gas. She said the accident was related to a release of pressure.

#### Ag industry drives research in nanotechnology

The Industrial College of the Armed Forces, Spring 2006, Final Report: Agribusiness Industry, http://www.ndu.edu/ICAF/Industry/reports/2006/pdf/2006\_AGRIBUSINESS.pdf

Like many other American industries, agribusiness is doing all it can to keep pace with a rapidly changing world. In looking at the [dynamics of change in the industry we reviewed the impacts globalization has had on both domestic and international markets. We determined that current American farm subsidies conflict with U.S. obligations, and interests, vis-a-vis the WTO. Our international travel to China gave us an appreciation of the delicate balance China must achieve in trying to feed its population of 1.3 billion people on just 7 % of the world's arable land. We also explored the threats posed by bio- and agro-terrorism, and the necessity to protect our food supply system from both intentional and inadvertent contaminants. Other dynamics of change we investigated were the exhilarating advancements in biotechnology, precision agriculture, and nanotechnology. America's strong commitment to agricultural research and development in these fields has enabled us to remain the world leader and to increase agricultural productivity six-fold over the past 50 years. We also explored the rapidly changing demands of American food consumption, and the how our affluence has led us to the brink of an obesity epidemic. Unequivocally, one of the key reasons for the success of U.S. agriculture is the government's outstanding direct support to the agribusiness industry. Since the United States Department of Agriculture was first established by President Lincohi in 1862, and the Morrill Act, establishing the massive Land Grant University System and Extension Service, was signed into law that same year the Federal Government has championed the cause of the American farmer. The industry would not be nearly as productive were it not also for the indirect support provided by the nation's extraordinary infrastructure. The last half of the paper was devoted to specific issues pertaining to agribusiness, to include mounting concerns over urban encroachment, water conservation and quality, labor shortages and the related issue of illegal immigrants, protection against bioterrorism and avian influenza, and the future impact of the Farm Bill and its relationship to upcoming WTO negotiations. We conclude the paper with several recommendations that we feel will enable American agribusiness to continue to play a major role in preserving our national security

#### Solves extinction, try or die

Lewis, Foresight Nanotech Institute Analyst, 2k2 (James, “Why nanotechnology may be our only hope”, <http://www.foresight.org/Updates/Update51/Update51.4.html#BookRev1>)

Douglas Mulhall has provided an excellent introduction to the emergence of molecular manufacturing and added one more powerful reason to the list of reasons why attempting to ban the development of nanotechnology would be a grave error. Mulhall proposes that we will need molecular nanotechnology and machine intelligence to survive various natural disasters that might happen sooner, and with more extreme consequences, than we would like to think. "The relatively calm natural conditions that allowed our technological society to develop during past centuries may be more rare than we thought. They may end. **...** a new survival imperative may inspire us to adapt to a universe that now appears more risky than we once thought." In trying to stimulate discussion of the challenges facing humankind, Mulhall explores three spheres—technology, nature's time bombs, and anti-technology backlash—and how these spheres might interact. The first section of the book provides a very good introduction to nanotechnology: history, recent progress, various definitions of nanotechnology, near-term applications, and molecular manufacturing. Also included is a discussion of plausible time frames to develop a molecular assembler, and the various factors that might accelerate or impede development. Extrapolating existing trends into the molecular future of the 21st century brings consideration of possible outcomes of mature molecular manufacturing and machine intelligence. Among these are personal aircars and robot companions, construction materials that make buildings and ships resistant to earthquakes and hurricanes, and the collapse of patents and intellectual property law as genetic programming automates innovation. Agricultural use of land will be eliminated as food is produced by molecular manufacturing. Human beings will share the world with Robo sapiens (autonomous intelligent machines), Homo provectus (upgraded, enhanced humans), and Robo servers (machines with high intelligence in certain narrow areas). In the second section of the book, Mulhall's consideration of "Nature's Time Bombs" unveils a much wider and more imminent series of potential disasters than most of us might have expected. In addition to the small but real possibility of a strike by an asteroid or comet, we are at risk in the near future from any of a number of volcanic eruptions, each of which could produce tsunamis that could smash a hundred miles inland along thousands of miles of coastline, or from global financial collapse produced by an earthquake that flattens Tokyo and withdraws trillions of dollars from the world economy. Making these accounts of potential environmental disasters even more sobering are facts, such as that 9-15 years of famine followed a volcanic eruption in 536 CE. And the fact that studies of Arctic and Antarctic ice cores indicate that until about 10,000 years ago, climate fluctuated much more violently than it has since; large changes occurred in years rather than centuries. As an environmentalist who is very aware of the disasters that Nature has visited on humanity in the past, and may visit again in the near future, Douglas Mulhall brings a unique perspective to environmental concerns about the development of nanotechnology. The "elephant in the room of environmentalism" is the fact that environmental groups ignore natural disasters except in the cases where human intervention seems to be making them worse. "The evidence suggests that if we continue to rely on existing ideas of 'living in harmony with nature' we may be thrown backwards centuries when disaster strikes. ... A war is going on between environmentalism and 'technologism.' This war may be distracting us from the true environmental challenge." This theme is restated throughout the book. "It's becoming clear that the more we learn about nature's extremes, the more we see that forestalling our perilous journey to a molecular age may relegate us to nature's dustbin."

#### Food supply key cause of future global conflict- agribusiness industry key to creating “strategic reserve” to prevent war

The Agribusiness Industry Study also took the opportunity to look more broadly at the relationship of agriculture and security on an international basis. As far back as Thucydides, national security policy analysts defined the three major causes of conflict: fear, the search for glory, and interest. There is no greater interest than that in feeding the people, and no greater fear than that of hunger. Moreover, the environmental pressures generated by agricultural production are often exported across national boundaries, leading to international tensions. These issues were of special interest to the group in light of the international field study in China, which perpetually faces the problem of feeding 20% of the world's people on about 7% of its arable land. The environmental pressures on land, water, and air have been heavy, and raise questions as to the sustainability of their agricultural sector in the years to come. More broadly, in a world that is likely to be increasingly stressed to feed its increasing population, America's agricultural capability serves as a form of strategic asset and reserve, which policy makers must ensure is preserved despite the pressures on this sector.

#### Independently, perception of power shift causes global nuclear war

Nye ‘91

(Joseph-, Dean of Kennedy School of Gov. @ Harvard, Bound to Lead, P. 17)

Perceptions of change in the relative power of nations are of critical importance to understanding the relationship between decline and war. One of the oldest generalizations about international politics attributes the onset of major wars to shifts in power among the leading nations. Thus Thucydides accounted for the onset of the Peloponnesian War which destroyed the power of ancient Athens. The history of the interstate system since 1500 is punctuated by severe wars in which one country struggled to surpass another as the leading state. If, as Robert Gilpin argues, "international politics has not changed fundamentally over the millennia," the implications for the future are bleak .45 And if fears about shifting power precipitate a major war in a world with 50,000 nuclear weapons, history as we know it may end.

### Solvency

#### Can’t export without LNG approval – doesn’t exist now.

Levi, ’12 (Michael A., senior fellow for energy and the environment at the Council on Foreign Relations. “The Case for Natural Gas Exports,” August 15, 2012

<http://www.nytimes.com/2012/08/16/opinion/the-case-for-natural-gas-exports.html>)

A related political and economic debate has emerged. A string of companies have applied for permission to export liquefied natural gas, or L.N.G., to countries that don’t have special free-trade agreements with the United States. Under federal law, the Energy Department has to find such exports to be consistent with the “national interest” before they can occur, though the term isn’t clearly defined. Last week, more than 40 members of Congress urged President Obama to move forward with approval, citing the benefits of free trade and the prospect of creating more jobs as demand for exports leads to growth in gas production. Critics pose a contrary set of arguments. They fear that demand for gas exports might encourage hydraulic fracturing, threatening water supplies, and they worry that siphoning off domestic gas for export will raise costs for domestic consumers and disadvantage American manufacturers that benefit from low-cost fuel.

Here’s more ev – the industry loves the new restrictions because they’re implemented slower – don’t kill productivity for three reasons

Broder 12

(John, Staff Writer for the New York Times, “U.S. Caps Emissions in Drilling for Fuel”, April 18, 2012, http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html?\_r=1&)

The standards were proposed last summer in response to complaints from citizens and environmental groups that gases escaping from the 13,000 wells drilled each year by fracking were causing health problems and widespread air pollution. Industry groups said meeting the proposed standards would cost hundreds of millions of dollars and slow the boom in domestic natural gas production. The original proposal was significantly revised, giving industry more than two years to comply and lowering the cost. “Because these regulations rely on technologies and practices that are already in use by some companies and required by some states, they are practical, flexible, affordable and achievable,” Gina McCarthy, head of the E.P.A.’s office of air and radiation, said in a conference call. “Natural gas is key to our clean energy future.” She said the new rule would reduce emissions of volatile organic compounds by 190,000 to 290,000 tons per year and toxic air pollutants by 12,000 to 20,000 tons a year. The agency said that the industry could meet the standards by deploying existing technology, and that nearly half the wells drilled using hydraulic fracturing already had the gas capture equipment, known as “green completions.” The agency said that once the rule was fully effective, in January 2015, the industry would save $11 million to $19 million a year because drillers would be able to capture and sell the methane that is now burned off, or flared. Methane is a potent heat-trapping gas, 20 times more powerful in its effect on the atmosphere than carbon dioxide. The E.P.A. estimates that capturing methane from thousands of new wells will reduce greenhouse gas emissions by the equivalent of 28 million to 44 million tons a year, making the rule one of the federal government’s largest measures to mitigate climate change. The American Petroleum Institute, which had lobbied to weaken the proposed rule, said the revised standards issued Wednesday were an improvement over the original proposal. Howard Feldman, the institute’s director of regulatory and scientific affairs, said the industry had already adopted many of the requirements of the new rule and welcomed the delay in its effective date. “The industry has led efforts to reduce emissions by developing new technologies that were adopted in the rule,” Mr. Feldman said. “E.P.A. has made some improvement in the rules that allow our companies to continue reducing emissions while producing the oil and natural gas our country needs.”

### Manufacturing

#### Manufacturing decline inevitable and it’s not key

MGI 12, Mckinsey Global Institute – research branch of the Mckinsey management consulting company, “Trading myths: Addressing misconceptions about trade, jobs, and competitiveness”, May, http://www.mckinsey.com/insights/mgi/research/productivity\_competitiveness\_and\_growth/six\_myths\_about\_trade

Myth: Mature economies are losing out to emerging markets in trade and thus face increasing trade deficits. Reality: The trade balance of mature economies has remained largely stable in the aggregate and even begun to improve. There are wide variations between individual countries, but no evidence supports claims of a wholesale deterioration of the trade balance between the mature and emerging economies over the past decade. Myth: Manufactured goods drive deteriorating trade deficits. Reality: Imports of primary resources, whose prices have been rising sharply, are the largest negative contributor to the trade balance of mature economies. In 2008, mature economies ran a 3.3 percent of GDP trade deficit in primary resources but a 0.5 percent of GDP surplus in manufactured goods and specifically a 1.6 percent surplus in knowledge-intensive manufacturing. Some individual mature countries run trade deficits in knowledge-intensive manufacturing. Myth: Trade is at the heart of the loss of manufacturing jobs. Reality: Changes in the composition of demand and ongoing productivity increases are the main reasons for the decline in the number of such jobs in mature economies. The share of manufacturing in these countries’ total employment is bound to decline further, from 12 percent today to less than 10 percent in 2030, according to our analysis. MGI finds that trade or offshoring are responsible for the loss of around 20 percent of the 5.8 million US manufacturing jobs eliminated between 2000 and 2010.