Quintessential Pragmatism IV

Before, we talked about many well meaning activists who want to preserve natural areas keeping them undamaged or even untouched by humans. This is a noble undertaking and these people should be respected for what they are trying to do. We also pointed out that the human demand for fossil fuel is high. It is high because fossil fuel is the cheapest and most readily available fuel. If other fuels were cheaper or more readily available, they would be in use now. So, from a practical sense, people are going to demand this fuel as long as it remains available and is the cheapest alternative. The present situation is shown in Figure I. Environmental activists are able to isolate and protect some sensitive areas through use of public opinion, the legal system, and hard work by a relatively few people. The problem is that in order to influence the fate of more than a few places, public opinion must turn larger numbers of people to the cause. These people who need to be turned are also major users of fossil fuel for their transportation, heating their homes, and providing the standard of living they enjoy. So every time they click on the furnace, or get a cold beer out of the fridg., or turn the key on their vehicle (any vehicle no matter how fuel efficient as long as it burns gasoline) they are asking an oil company to go find some more fuel. Indeed, the environmentalists themselves, whenever they drive a gasoline burning vehicle to a meeting, are part of the problem rather than part of the solution. So rest assured, we will use oil and gas until it's gone or until another source of energy becomes cheaper.

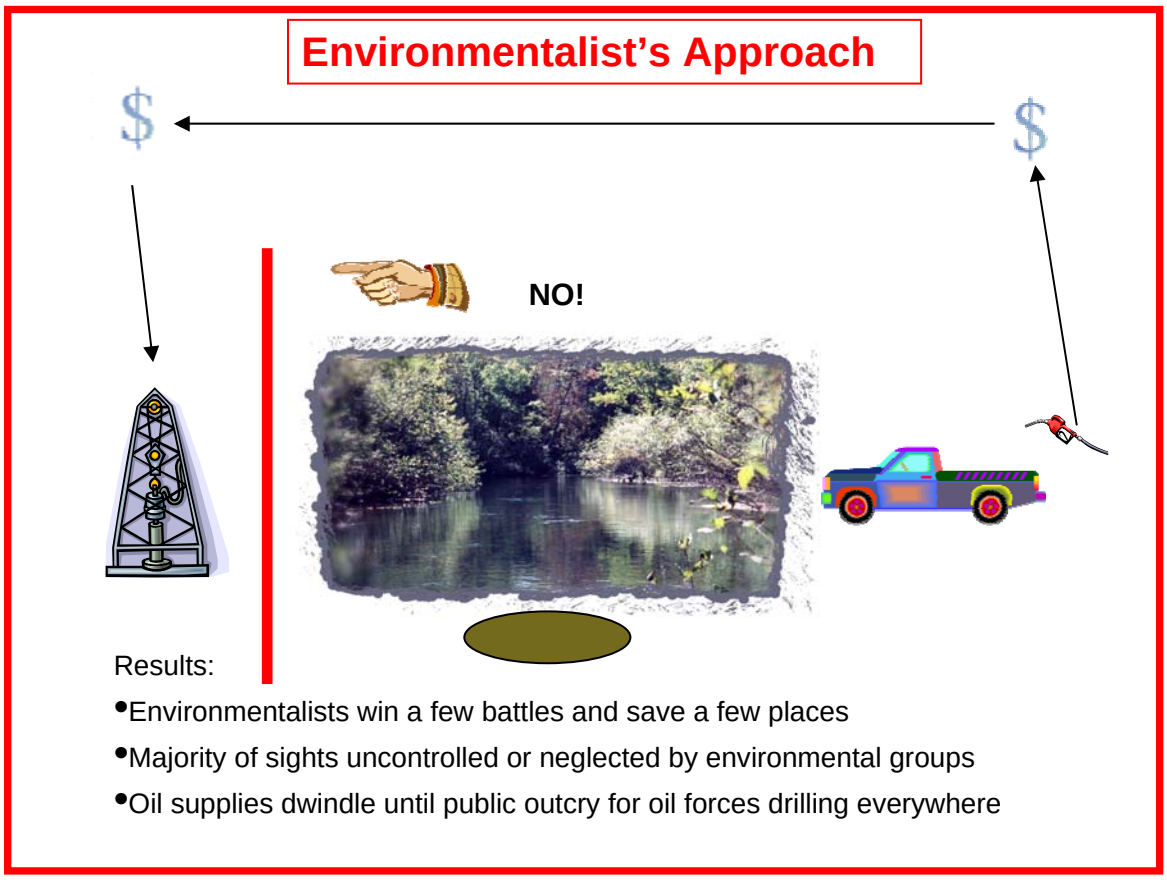

Figure I.

So when public demand rises to a fever pitch because of the lack of oil availability, companies supplying that demand will be given carte blanche in their recovery processes and the environmentalists will be swept aside. There simply won't be enough people as concerned about the environment as they are about heating their homes and getting to work. The situation will change to what is shown in Figure II.

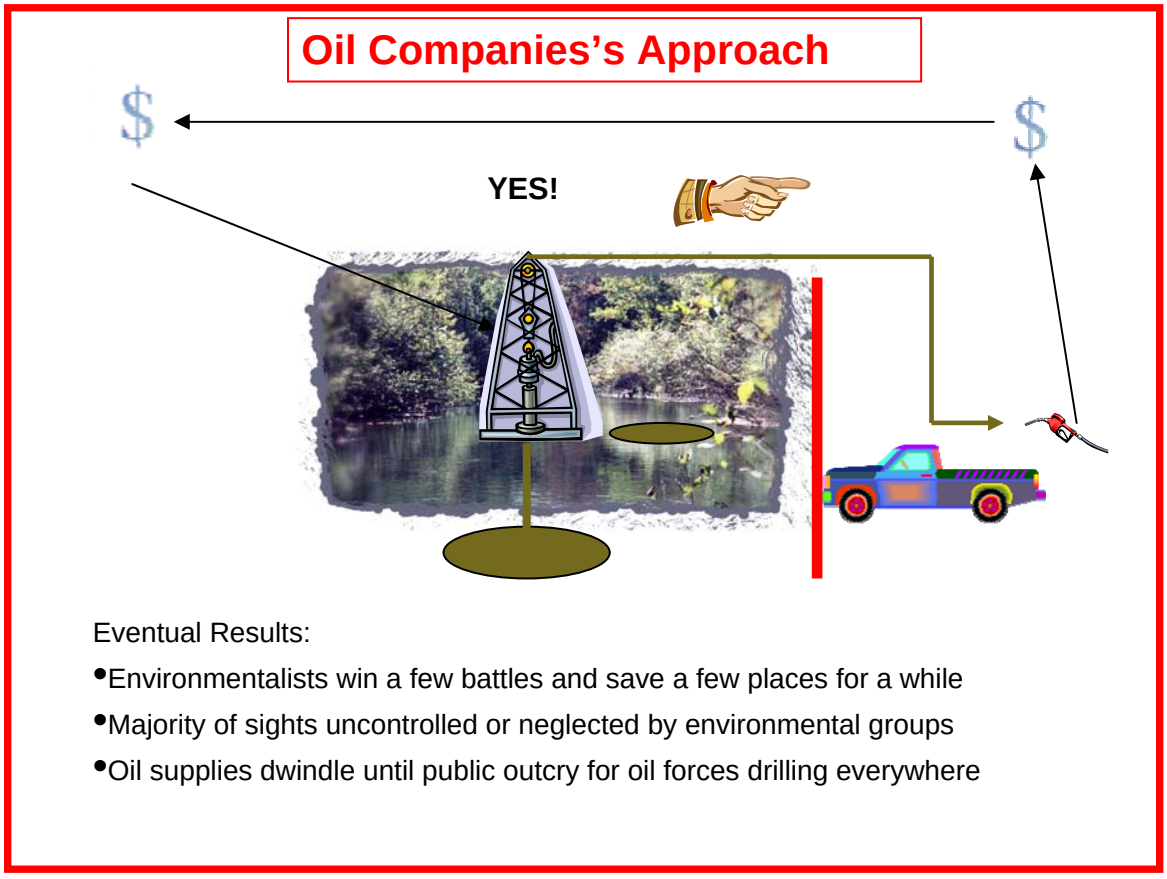

Figure II.

Unfortunately, in the end, those concerned the most about those precious places, will have been those who sped their demise. Why? Because, in the early stages, they had the opportunity to do something different. They had the opportunity to force compromise and didn't do it. Both sides will claim they tried to compromise, but said the other side wouldn't listen. And maybe that was true. But if you set your sights on winning, then compromise is also losing. But if both sides set their sites on compromise, both sides can win.

So, is QP guilty of screaming at the darkness? To this point in this dissertation, that is definitely true. But how about we offer a solution, maybe not a perfect one, but a start. Industry, and in particular, the manufacturing industry has developed tools which are aimed and insuring quality and reliability to products sold to the public. Those tools which are of particular interest to our problem at hand are: ISO 9000, Failure Modes and Effects Analysis (FMEA), and Analysis, Development, and Validation (ADV) Plans. These are structured tools

aimed at quality assurance and are in use throughout American Industry. An explanation of each follows:

ISO 9000

ISO 9000 (also 9001, 9002, 9003, QS9000) is a procedure to document all key processes of a business. This would include monitoring manufacturing processes to insure quality in the product, keeping formal and understandable records of all these processes, checking and monitoring these processes for defects, taking appropriate action to correct defects, documenting these defects and action items, and regularly reviewing the processes for effectiveness.

FMEA (Failure Modes and Effects Analysis)

FMEA is a structured procedure to identify the failure modes in a process which can cause them to fail to meet a customer requirement. The probability of incurring such a failure and the consequences of the failure are identified and prioritized. Priority here is a key word. Also a method to evaluate the effectiveness of the control plan to prevent failures should be present.

Analysis, Development, and Validation Plan (ADV)

This plan is a direct result of the output of the FMEA. Once a failure mode is identified and prioritized, a formal structure to analyse, develop, and validate a solution for the failure mode must be documented and used.

QE's Proposal

(You should not scream at the darkness unless you have an alternative proposal)

If the drilling contract or permit issued to an energy recovery company contained requirements for the company be ISO 9000 compliant and the procedures for energy recovery on public holdings be a matter of public record,

and

if FMEA's were required for each site and the team doing the FMEA was a multidisciplined team with full representatives of government and enviromental bodies on board to ensure enviromental concerns were addresses and remedied,

and

if the ADV meetings were public record and had permant representatives for enviromental concerns,

we just might get a process which would permit energy recovery while ensuring the highest possible protection of the environment. And it might look like Figure III.

QP's Approach

QE Results:

- ISO 9000 (or QS9000) Compliant Companies
- Failure Modes and Effects Analysis Performed on each site
- Analysis, Design, Development Plans including environmental impact
- All systems performed by multi-disciplined teams including environmental groups and open to public, environmental, and government oversight = no secrets

Input and participation

So what do you think? Aim at compromise for safe energy recovery, of fail in the end for everyone. Now is the time to choose.