

Green Project Management and the BP Deepwater Horizon Spill

There are many examples of projects undertaken to produce some deliverable with environmental implications. In fact, one may assert that in fact, **any** project, since it uses resources, has environmental implications. This varies tremendously, based on scale and the direct impact on the environment. One project that clearly has environmental implications is the Deepwater Horizon drilling project and what is often called “the Gulf of Mexico oil spill disaster”.

*At the Congressional hearings, it was revealed that BP had “copied and pasted” older environmental response plans from other companies (i.e. the Exxon Valdez spill) – this is why the BP response plan had **walruses** as one of the impacted species, and why several of their reference scientists had long since passed away. The fact that this type of copying and pasting even occurred indicates that the awareness level was NOT communicated at the critical project charter level.*

Important note: We do not purport to say that any specific single action or philosophy that we enumerate below would have prevented the Deepwater Horizon disaster or led to its instant cleanup. What we do assert, however, is that taken collectively and holistically, an intense focus on green thinking would have had a tremendously positive impact on the disaster.

Many companies are incorporating environmental considerations into their thinking about the deliverables of their projects, and some are even integrating this thinking into the operation of that deliverable. However, are they truly following green project management processes to assist them in their decision making process throughout the project and beyond? We assert that Green Project Management can be applied to *all* projects. Even those that may not appear to be creating a deliverable with an environmental impact still have environmental aspects that can affect their decision making (for example, even if one is developing a new software release there are decisions to be made that affect the environment – decisions such as meeting policies, method of duplicating the software, energy considerations for the servers involved, and so on).

Both TenStep and EarthPM believe that the environment should be considered in any project - and therefore in an organization's project management processes. We also think that doing this is not only the right thing to do but that it will benefit the organization. Both organizations have published various communications which provide thought leadership on this subject (refer to www.green-pm.com and www.earthpm.com).

We've decided to apply examples from Green Project Management to the challenges faced (mainly by BP) in the Gulf Coast oil spill. The main thrust of Green Project Management is not that every decision will be made differently or “in favor of” the environment, but instead that each project needs to *consider* the environment in its decision making process. This of course includes the conservation of the *project's* resources, which should already be part of the project manager's mission.

What we are suggesting here are some ways in which Green Project Management may have provided BP with key insights that, taken

holistically, may have done some of the following (in the abstract, anyway):

- Prevented the disaster or at least limited the extent of the damage
- Made it easier to repair once it happened
- Allowed BP and the other responsible parties to deal more skillfully with key stakeholders.

Let's consider the example of Green Project Management in completing a project to define, develop, and implement the oil rig. Note that some of the examples below may not directly apply to the Deepwater Horizon project, but are provided as examples to demonstrate the principles of Green Project Management.

Project Charter

Have you ever seen a Project Charter template that has a section on environmental concerns? It's rare now, but we predict it will become much more prevalent. Perhaps if the Charter for the Deepwater Horizon project included a detailed section on environmental impact, it would have raised the awareness of the project team and associated stakeholders with regards to improved means to *prevent, mitigate* (with activities such as relief wells), and *respond effectively* to spills. A charter written with an environmental view also may have allowed BP to focus more effectively on the clean up process, because decisions like the purchase of Ocean Therapy boats ([see this posting](#)) would be indicated at a Charter level.

BP may also have identified a need to further evaluate its vendors/partners experience in prior, similar projects. Lastly, it may have resulted in a need to further invest in considering alternate approaches with various stakeholder groups, to assure the necessary buy-in prior to undertaking the project.

Project Scope Management and Project Integration Management

If the oil rig required additional drills, or a change in the materials used to create the drill or the oil platform, then scope change management process should have been invoked. Note that the latter could have been a requirements change, part of project scope management. When invoking scope change management, the environmental impact could have been considered, in addition to the impact on all other project management processes (schedule, cost, quality, risk, procurement, etc.) as evaluated through integrated change control. Perhaps a change in materials requirements would result in procuring materials from a different vendor. We discuss this further in the section on procurement management.

Project Management Plan – An Environmental Management Plan component

Existing BP environmental policies – which we're sure that BP has in great number, considering their size and experience - need to have been used as an input to the *project's* Environmental Management Plan, **identifying the environmental policies applicable to the project** and the sustainability requirements for the project.

Requirements Management

When gathering requirements for the oil rig, BP could have reviewed its defined project Environmental Plan (linked to the company's parent Environment Management Plan) and confirmed that the requirements for the oil rig would adhere to the plan. Making it clear to the project team that this linkage exists is a way to reinforce what should be elemental to the team's behavior but sometimes can slip behind other priorities if not kept in the forefront.

Much has been said about the regulating agency, the [MMS](#) and their oversight (or lack thereof) of oil companies. Ostensibly, the MMS should have been putting proper requirements on the companies doing the drilling. As is the case with good project management practices, however, the vendor themselves has to ask the question: '*who are the stakeholders, and what are their requirements?*' Perhaps with this mindset and a well-conceived (excuse the pun) and ethically-responsible environmental management policy - not just at a corporate level, but at a project level - an increased focus on both preventing the spill from happening and being able to effectively clean up after, would have resulted in a more thorough collection and communication of these environmental requirements before beginning to drill.

Cost Management

When estimating project costs, did BP consider costs for implementing any risk response strategies?

As mentioned in the Charter section, one could look at the Kevin Costner-funded [Ocean Therapy centrifuge boats](#) as an example. For a relatively small investment, BP would be buying not only an easy way to clean up after a possible spill, but would gain valuable positive PR by aligning with the high-profile actor and his efforts to protect the Gulf. Perhaps it is too optimistic to think that the oil companies would have identified oil cleanup technology as a part of risk-response, but it certainly is within the realm of reason that cleanup technology and costs would be included in risk contingency plans (the plans that are put into effect if the original risk plan fails).

In fact, a recent news story shows that – although late – the oil industry has pooled their resources and is collaborating on oil spill response. [See this Reuters news story.](#)

Identifying the costs related to the project's environmental aspects allows the project manager to discuss the costs with the Sponsor and determine whether the cost is more than offset by the project results. The financial costs of the realized threat are so high in this case – in the tens of billions of dollars and in fact the continued life of the company itself – that a different type of thinking has to be applied. As is obvious now, BP could have invested more upfront to further mitigate or avoid the risk of spilling oil into the ocean. Even with Green Project Management, if BP's decision was not to invest more in a risk response strategy, then perhaps they should have estimated the contingent costs required for a clean-up activity as they are currently undertaking. *See the risk management section.*

Communication Management - Identify Stakeholders

How thorough was the stakeholder plan and ultimately the Communication Plan prepared by BP for this project? This project appears to have many key stakeholder groups, both internal and external. Was every major stakeholder group - internal BP, NGOs, government, industries/associations (e.g., fishing along the Gulf Coast), etc - identified and considered? Were they all included in the communications as BP developed and implemented the oil rig?

What type of communications plan would allow BP Chairman Carl-Henric Svanberg to say “we care about the small people.”? We assert that with properly identified stakeholders and a thoughtful stakeholder management plan, this likely would not have happened.

Risk Management - Probability and Impact Assessment

Really, this entire incident comes down to the way BP and others managed project risk. The context is greater than risk management, as you can tell by the number of other headers in this document. But it really comes down to project risk management. With “greenthink”, risks may be evaluated differently.

If we consider environmental factors that had never been applied, then BP may have identified the risk of the blowout as an extremely low probability of occurrence (based on prior experience, faith in the blowout preventer, competitors' experience, etc) but a very high impact when considering the environmental impact. In fact, a very similar accident occurred in 1979 the [Ixtoc](#). In that case, the blowout preventer also failed. So there was a precedent for this type of failure. It could not be considered a “failsafe” solution. The assessment could have also included the environmental impact of a blowout that occurred in Santa Barbara, California, in 1969. Was their assessment of the impact high enough?

With such a low probability, you would have to have a huge impact for the product of probability and impact to give a risk score worth pursuing. We assert that the probability was considered to be zero and that the impact was tremendously undervalued. Without considering the environment aspect in project management process of risk management, the product was low enough that the risk mitigation and response was inadequate. As we noted above, Green Project Management may not result in a different decision. However, we are discussing this event because it truly depicts the importance of considering the environment and making sure that all project-related risks are properly identified, quantified, and addressed with the Sponsor and key stakeholders.

Procurement Management

When planning and executing procurement activities for this project, did BP:

- Validate that their vendors/partners (such as Halliburton) met *their* environmental requirements?
- Understand how their vendors/partners would align to BP's environmental policies and project approach?
- Request feedback from vendors/partners on how they would align with environmental policies?
- Audit that the vendors/partners were actually following the environmental policies?
- Audit that the deliverables met the defined environmental criteria?

Summary

These examples have been provided to demonstrate how Green Project Management could assist in incorporating environmental thinking in any project. These scratch the surface in factoring the environment into project management processes. Perhaps BP accomplished these and more. Then again, perhaps a more structured approach to including the environment in all project management processes would have uncovered some of the issues and led to some very different decisions during the project, prior to deciding to drill more than five thousand feet deep in the Gulf of Mexico.

We assert that the point of Green Project Management is to view projects through an “environmental lens”. Perhaps, if that happened, some decisions would be made differently, with very different results.

About the Authors

TenStep, Inc, focuses on methodology development, training, and consulting, through its worldwide network of offices. Its focus on green project management (www.green-pm.com) was pioneered by Tom Mochal and Andrea Krasnoff.

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*EarthPM is dedicated to the “intersection of green and project management and is a collaboration between Rich Maltzman and Dave Shirley, co-authors of [Green Project Management](#), CRC Press. EarthPM provides the critical link between project management and environmentalism to **increase awareness amongst project managers of the power they have to improve the greenality and effectiveness of their projects** – whether or not they are directly involved with the environment. Through their website EarthPM.com, Rich and Dave provide a variety of blog postings [and](#) resources, as well as consulting and course development services in Project Management and Green Project Management.*

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