

Always Low Prices AND Environmental Clean-ups?

**A Case Study of Environmental Compliance Negotiations
in a Land Sale Agreement
Wal-Mart and MBS Mall-Investor-98 LLC.
Kansas City, MO**

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Introduction

Environmental conflicts usually involve multiple parties where government, private, and public interests clash over the management of natural resources or the application of environmental regulations. These multi-party conflicts incite debates over values, economic interests, political affiliations, human rights, and ecosystem health. Although many of these multi-dimensional environmental conflicts garner much media attention, there are hundreds of smaller decisions which affect the environment being made daily around the negotiating tables of corporations worldwide.

My aim in the following paper is to analyze one such negotiation. The particular environmental compliance issue in this case was negotiated as part of a larger land purchase agreement between the multinational retail colossus Wal-Mart Inc. and a Kansas City, MO-based mall property owner, MBS Mall-Investor 98 LLC. Throughout the negotiation of this land deal, various decisions with environmental ramifications were made. However, one dispute over the appropriate level of remediation of a petroleum-contaminated site previously owned by Amoco/British Petroleum and the financial responsibility for that remediation delayed negotiations for several months and, more than any other single negotiation issue, held the potential for dissolving the entire deal.

After months of consultation with various technical experts and environmental lawyers, the dispute was resolved and the land sale was able to move forward. The site was cleaned to the standards demanded by the land purchaser, Wal-Mart, and the financial responsibility was assumed by the property owner, MBS. From an environmentalist's viewpoint, this negotiation may be deemed an environmental success as the soil was remediated to the cleanest possible level. However, from an environmental conflict resolution perspective, I believe that this negotiation illustrates a case in which clear communication between the technical experts and the non-scientifically versed negotiators could have potentially improved the final outcome, as lingering technical questions and dissatisfaction remains on the part of MBS.

I will utilize the tools of negotiation analysis to illuminate the context of this particular dispute. By highlighting the various roles and interests of the scientific consultants, I will describe how the limitations of these roles led to an unsatisfactory outcome for one of the negotiating parties. Using this case study as an example, I will then develop lessons learned and recommendations for similar conflicts which involve stakeholders with differing levels of scientific expertise.

Methods

During the fall of 2006, I utilized four primary forms of data collection to familiarize myself with the scope of this negotiation: Interviews with key stakeholders and negotiating parties, review of primary sources (emails and reports), review of secondary sources (local newspapers), and scholarly research.

I was able to interview 4 of the 6 stakeholders/parties to the negotiation, and questions concerned their roles in, and opinions of, the final determined outcome. Through analyzing newspaper articles, emails, letters, and reports provided to Project Manager and primary negotiator for MBS, David Horn, I was able to construct the context of the dispute. I specifically utilized the tools of negotiation analysis to characterize the parties involved in the dispute, their roles, interests, best alternatives to negotiated agreement (BATNAs), and their stated positions with regards to the issue of remediation of the Amoco site to residential target levels.

I then utilized the data from interviews with the scientific and technical experts involved in the negotiation to construct their roles in this process. Through comparing their roles in this conflict with scholarly papers on the historical and potential roles of scientists, I developed recommendations for a role of scientists that may have led to a more equitable and satisfactory outcome for the parties.

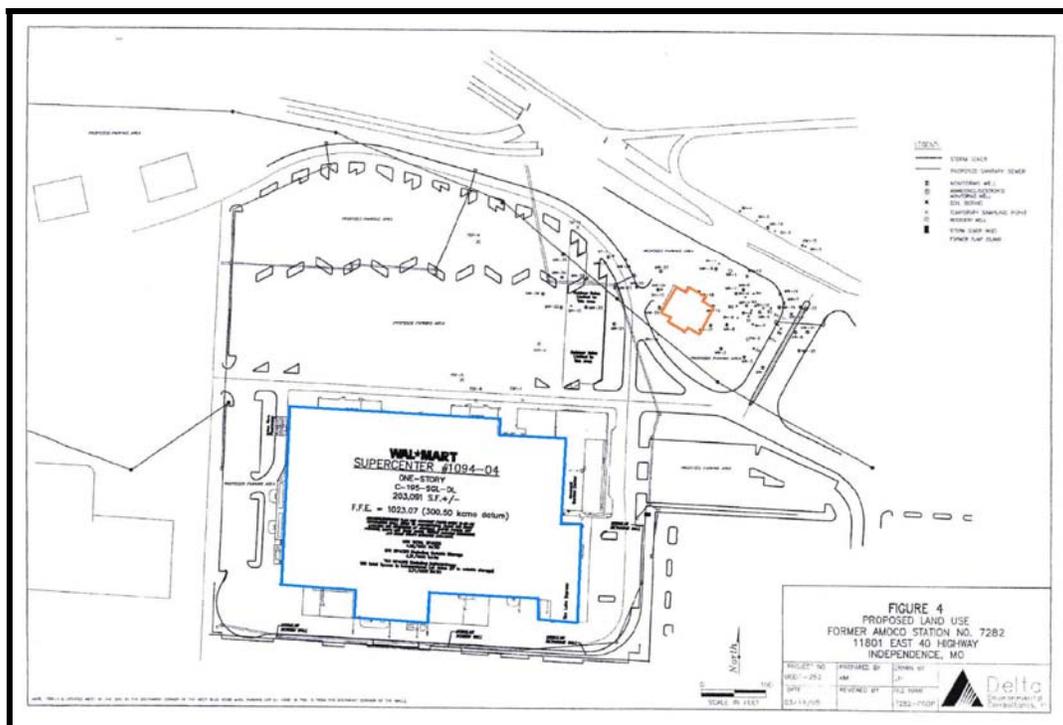
Background

Development History of the Disputed Site

The site under consideration was located adjacent to the former Blue Ridge Mall in Kansas City, MO. The Blue Ridge Mall, constructed in 1958 near the busy intersection of Highway 40 and Interstate I-70, enjoyed a 30 year period of financial success as one of the few shopping centers serving this section of the city. However, in the 1990s, as suburban mall complexes developed around the area, the Blue Ridge Mall faced increasing competition, and the by the late 1990s was deemed ‘economically obsolete’ with 80% of its retail space vacant and tax revenues provided to the city declining precipitously from \$500,000 to \$150,000 between 1996-2004 (Burnes, 2006).

The Blue Ridge Mall and surrounding land was purchased by MBS Mall-Investors 98, LLC in 1998. An abandoned Amoco filling station outparcel adjacent to the mall was purchased in 2001, bringing total land holdings to 60 acres (*see Figure 1: Site Plan*). Despite various mall revitalization projects initiated by MBS, the mall continued to struggle financially. To remedy the situation, MBS embarked on a radical redevelopment project in 2003 which involved the complete demolition of the Blue Ridge Mall and the subsequent sale of plots for redevelopment.

Figure 1: Site Plan of the Future Wal-Mart (in blue) and abandoned Amoco station (orange)



One of the pivotal sales and negotiations in this redevelopment plan took place with Wal-Mart, a multinational retailer whose \$312 billion annual revenues and 6,600 big box stores make Wal-Mart Inc. the largest corporation in the world (Gunther, 2006). The negotiations between Wal-Mart and MBS began when Wal-Mart approached MBS in the Fall of 2003. The negotiated land deal concerned the sale of 21 acres of the 60 acre site for the construction of a Wal-Mart retail store and parking lot. This \$88.2 million redevelopment project would feature Wal-Mart as one of the key ‘anchor’ retailers of the new Blue Ridge Crossing Shopping Center.¹

Negotiations between the two entities continued for 18 months as various points of the purchase agreement and development agreement were deliberated. The redevelopment plan met with some community resistance along the way, as \$25 million of the \$88.2 million was being financed through Tax Increment Financing (TIF), which spurred a series of lengthy hearings with the Kansas City Council. Also, the announcement of plans to construct a Wal-Mart incited protests from union organizers, and in late August of 2006, members of the Carpenters District Council of Kansas City and Vicinity mounted a large banner near the construction site, claiming that the use of subcontractors from out of town was ‘breaking down area wage standards’ (Burnes, 2006).

Within the negotiations however, MBS and Wal-Mart were able to come to agreement on all but one term of the purchase and development agreements. Within the agreements were stipulations which affected myriad environmental issues such as the provision of stormwater retention plans, provision of adequate green space, asbestos abatement of the Blue Ridge Mall prior to demolition, and the recycling of demolition products. By far the most contentious of these environmental issues was a dispute over the appropriate level of remediation of the petroleum-impacted soils and groundwater contained at the site of an abandoned Amoco filling station. According to David Horn, Project Manager of the redevelopment project, this dispute, which delayed negotiations for 6 months, could have potentially “derailed the entire land sale, and jeopardized the future of the Blue Ridge Crossing Shopping Center redevelopment project.”²

¹ The construction of the 195,000 square foot retail space was projected to create 1,200 construction jobs, and 1,600 full-time jobs for Wal-Mart employees, generating a total revenue of \$29.3 million for Kansas City residents (KC Business Journal, 2004).

² (personal communication, November 22, 2006).

Remediation Site History

The retail gasoline station last operated as Amoco existed immediately east of the mall structure, and was closed for operation in July of 1991. Following the leaky underground storage tank (LUST) removal activities in that year, 3,154 cubic yards of petroleum impacted soil was excavated and transported off site for proper disposal. A groundwater remedial system was operated on the site from 1994-1998, and 1.5 million gallons of impacted groundwater were treated and discharged.³ Chemicals of concern found in the groundwater included gasoline and diesel compounds known to cause health effects if present in drinking water supplies including benzene, toluene, ethyl benzene, MTBE, and naphthalene (Pace Analytical Laboratories, 2004).

The removal of tanks and remediation of the site was funded by the Missouri Petroleum Storage Tank Insurance Fund (PSTIF) at a cost of \$375,000.⁴ After the initial removal and cleanup of the LUSTs, the financially responsible party, Amoco (now British Petroleum), hired Delta Environmental Consultants to install monitoring wells and monitor the site to assure compliance with Missouri Department of Natural Resources Tanks Section standards outlined in the Missouri Risk Based Corrective Actions process (MRBCA).⁵

In January 2005, as the land was being considered for sale to Wal-Mart, Delta Environmental initiated the MRBCA process. The resulting evaluation, submitted in April 2005, concluded that the residual contamination still present at the Amoco site did not exceed the Tier 1 non-residential Risk Based Target Levels.⁶ Consequently, the MDNR issued a letter of no further action (NFA), signifying that the site was in compliance with levels for development of non-residential properties, and that no further remediation activities were necessary.

³ (Kingston Environmental Services, personal communication, June 23, 2005)

⁴ The PSTIF is administered by the Missouri Department of Natural Resources Hazardous Waste Program Tanks Section. The PSTIF, established in response to EPA legislation by the Missouri General Assembly in 1989, provides owners and operators of underground storage tanks (USTs) financial resources to pay for cleanup of spills and/or leaks from their tanks. This Fund is financed primarily from a fee attached to all petroleum sales in the state, and has to date insured more than 32,000 UST sites (<http://www.pstif.org/>).

⁵ The Missouri Risk Based Corrective Actions process (MRBCA) outlines the process used by the Tanks Section from discovery of soil contaminated by LUSTs through the implementation of risk management activities. Within the MRBCA exist three tiers of risk assessment activities, in which contamination data is collected and compared to Risk Based Target Levels (RBTLs). These RBTLs are set depending upon the zoning and use of the land, either as residential or non-residential. The MRBCA process concludes with the issuance of a No Further Action (NFA) letter, once the site has been remediated to levels that “protect human and environmental health under both current and reasonably anticipated future activities on and near the site”

(<http://www.dnr.mo.gov/env/hwp/tanks/mrbca-pet/docs/mrbca-pet-sect2.pdf>)

⁶ (Delta Environmental Consultants, personal communication, January 18, 2005).

Table 1: Dispute Timeline

Date	Events Relevant to Remediation Dispute
1958	Blue Ridge Mall opens as one of area's first shopping centers
Early 1990s	Mall begins to struggle financially
1991	<p>Amoco filling station and Firestone Service Center close. Removal of tanks and remediation of sites by the PSTIF at a cost of \$375,000.</p> <p>Based upon review of analytical data related to Amoco site, MDNR finds that no further remedial action is warranted at that time, and issues an NFAL for the site. However, should future petroleum-related environmental problems arise, MDNR reserves the right to require responsible parties (Amoco/BP) to conduct additional investigation and remedial actions.</p>
1998	MBS Mall Investor-98 LLC purchases the Blue Ridge Mall.
2001	The specific parcel later sold to Wal-Mart (and containing the contaminants from the Amoco site) is purchased by MBS Outparcel LLC. Amoco/BP is still identified as party responsible for monitoring and clean-up for LUST site.
Nov. 2003	After several unsuccessful mall revitalization efforts, MBS enters into negotiations to sell outparcel to Wal-Mart for development of a retail store.
April '04	Purchase agreement signed between MBS and Wal-Mart for parcel.
November, 2004	Katz Law firm (on behalf of Wal-Mart) contacts MBS Mall Investor representatives, regarding the two leaking underground storage tanks (LUSTs) including the Amoco station. The impact of these two LUST sites causes concern for them, as there will be a delay in construction until Tier 1 Risk Assessments and Tier 2 are completed (as required to close the site and remove monitoring wells for construction of Wal-Mart). Wal-Mart is not willing to incur an costs associated with the clean-up and the removal of monitoring wells.
January, 2005	Delta is hired on behalf of BP to conduct a Risk Assessment per the MRBCA Guidance. This evaluation concluded that the residual contamination still present at the site did not exceed the Tier 1 non-residential Risk Based Target Levels. MDNR issues a letter of NFA.
Spring 2005	Before closure of land deal, Wal-Mart informs MBS that they require the Amoco site to be remediated to Tier 1 residential standards prior to construction activities commencement.
April 2005	MBS contacts BP to request payment of remediation. BP denies responsibility as site currently meets non-residential standards, and it is their position that remediation is unnecessary.
May 2005	Both BP and Delta insist that the PSTIF could not assist in funding the remediation to residential standards, as they cited the unlikelihood of residential development at the site.
June 1, 2005	MBS accepts responsibility for the remediation of the site to Tier 1 residential Risk Based Target Levels. Kingston Environmental Services proposes plan for remediation to MBS.
June 23, 2005	KES submits the Corrective Action Plan to the MDNR. Plan outlines the excavation and remediation of affected soils and groundwater.
August, 2005	MDNR approves the corrective action plan proposed by KES
September, 2005	Remediation of site occurs and is paid for by MBS at cost of \$250,000.

Dispute Narrative

The residual contamination identified by Delta Environmental Consultants, although compliant with *non-residential* standards, did not meet current *residential* Risk Based Target Levels (RBTLs). Consequently, the purchase agreement between MBS and Wal-Mart would have been written to include a deed restriction which limited the use of the land to non-residential uses. In response, Wal-Mart demanded that the land be remediated to residential RBTLs in order to remove the deed restriction. Citing the desire to purchase land with no activity use restrictions, Wal-Mart insisted that the land be cleaned up to reach this higher standard.⁷

MBS representatives then consulted with Delta Environmental and BP to determine the financial responsibility for this cleanup. According to PSTIF regulations, the funds may only be used to clean sites to the level determined by their current and probable future use (in this case, non-residential). Therefore, PSTIF moneys could not be allocated for this non-essential remediation. BP subsequently denied responsibility as the site currently met the non-residential standards, and it was their position that remediation was unnecessary. Upon consultation with Kingston Environmental Services and Delta Environmental, MBS concurred that the site's proximity to I-70 made it unlikely that it would be developed as residential land, and therefore Wal-Mart's request was "unreasonable."

This fundamental disagreement over the necessity of remediation to higher than required target levels, and the determination of financial responsibility were such a remediation carried out, stalled the signing of the development agreement for 6 months between January and June of 2005.

⁷ (Katz Law Firm, personal communication, November 15, 2004).

Outcome

On June 1, 2005, MBS yielded to Wal-Mart's demands, and hired Kingston Environmental Services to carry out the contested remediation. Throughout the summer of 2005, Kingston submitted and received approval from the MDNR for their proposed Corrective Action Plan. In September of 2005, 40,000 cubic yards of petroleum-impacted soil was removed and replaced with clean backfill material.⁸ The contaminated soil was relocated to another part of the site, and the groundwater was treated on site (*see Figure 2: Photo of Remediation Work in Progress*). The \$250,000 cost was paid in full by MBS Mall Investor-98 LLC.

Currently, the redevelopment project is underway with the Wal-Mart scheduled to open in January of 2007. The remediated land is currently covered in pavement as it comprises the entrance from Hwy 40 to the shopping center access road and a portion of the Wal-Mart parking lot.

Figure 2: Photo of Remediation Work in Progress (November 11, 2005)



Photo courtesy of: MBS Mall-Investor 98, LLC.

⁸ The petroleum-impacted soil was excavated, and then spread over the site in layers to allow for the volatilization of the organic compounds into the atmosphere. The soil, once remediated, was then relocated to another outparcel on the 60 acre MBS property. Had the soils been taken to a landfill, the total cost of remediation could have surpassed \$1 million. (Debbie McWilliams, personal communication, December 4, 2006).

Negotiation Analysis

In order to reconstruct the negotiations between Wal-Mart's initial demand in January and MBS' final concession in June, I will utilize the tools of negotiation analysis. The term negotiation analysis was first described by Raiffa (1982) who introduced the field as an integration of game theory and multiple criteria decision analysis. Negotiation Analysis has typically been used to develop prescriptive theory and useful advice for negotiators and third parties involved in a dispute (Sebenius, 1992). With its focus on underlying interests, best alternatives to negotiated agreement (BATNAs), and the joint creation of value, it has become a key tool for assessing negotiation and developing winning strategies (Watkins, 2000).

In this particular dispute between Wal-Mart and MBS which has already produced an outcome, negotiation analysis obviously cannot be used to prescribe strategies for the parties, but I will use its basic diagnostic tools in order to characterize the dispute.

This was essentially a two-party negotiation, however various environmental consultants and the MDNR as the government regulatory body also helped to shape the process and outcome of the negotiation. Table 2 provides the stakeholders/parties and their roles in the process. Table 3 provides an analysis of parties' interest, BATNAs, and stated positions with regards to the issue of the remediation of the petroleum-contaminated site to Tier 1 residential levels.

Table 2: Parties and Roles in the Process

Party	Role
MBS Mall-Investors 98, LLC	This private development corporation was formed specifically for the purpose of managing the Blue Ridge Mall properties. MBS owned the 60 acre former site of the Blue Ridge Mall and surrounding outparcels, one of which was under negotiation for sale to Wal-Mart.
Wal-Mart Inc	This multinational corporation, which operates 6,600 retail concepts (Wal-Mart, Neighborhood Market, Sam’s Club and Supercenters), entered into negotiations with MBS for the purchase of a 21 acre outparcel for the construction of a retail center and parking lot.
Delta Environmental Consultants	A team of scientists and engineers hired as consultants by BP for the purpose of monitoring the abandoned Amoco LUST site. Delta Environmental installed 36 monitoring wells, and submitted reports to BP and the MDNR as to contaminant concentration and plume movement. Delta was the sole provider of scientific data for these monitoring wells, and compliance with MDNR non-residential and residential Risk Based Target Levels were determined based upon Delta’s findings.
Amoco/British Petroleum (BP)	Amoco/BP was the owner/operator of the filling station which closed in 1991. The underground storage tanks at this filling station leaked petroleum compounds into the surrounding soil and groundwater. According to Missouri state law, Amoco/BP is responsible for the remediation of the site to Tier 1 non-residential Risk Based Target Levels, and the Petroleum Storage Tank Insurance Fund provides them with the funds to meet this requirement.
Kingston Environmental Services	This Kansas City- based environmental firm works on environmental compliance issues such as indoor air quality testing, asbestos abatement, and hazardous waste remediation. Kingston Environmental was hired by MBS (after the submission of the April 2005 report produced by Delta) to provide consultation and scientific expertise during the negotiation, and also to eventually carry out the remediation of the 21 acre outparcel to meet Wal-Mart’s demands.
Missouri Department of Natural Resources (MDNR)	The Tanks Section of the Division of Environmental Quality is charged with the registration, regulation, and environmental oversight of leaky underground storage tanks (LUSTs). MDNR administers the Petroleum Storage Tanks Insurance Fund (PSTIF) to sites which qualify for use of the funds, and also issues No Further Action (NFA) letters once a site has been remediated to the required levels.
Blackwell-Sanders Law Firm	Environmental law firm hired by MBS to determine their financial responsibility for clean-up of the site. Also provided technical advice to MBS.

Table 3: Analysis of Interests, BATNAs, Positions

Issue: Potential remediation of LUST site to Tier 1 residential levels and financial responsibility for said remediation

Parties:	Interests	BATNA	Positions
MBS Mall Investor-98 LLC	<ul style="list-style-type: none"> -Selling the site to Wal-Mart in order to assure an ‘anchor’ tenant- with assumption that a highly recognizable store such as Wal-Mart would promote the leasing of other MBS developments on-site. - Maximizing profit in the sale of the property. 	<p>If MBS did not comply with Wal-Mart’s demand, entire land sale could have been jeopardized.</p> <p>If land sale did not occur, redevelopment project would have stalled significantly, as Wal-Mart’s presence would have attracted many other interested retailers.</p> <p><i>Low BATNA.</i></p>	<p>MBS was willing to work with Delta/BP/MDNR to meet remediation standards to Tier 1 non-residential as required by law, and as paid for by PSTIF.</p> <p>However, they viewed Wal-Mart’s request as “unreasonable” as land is not zoned for residential, and due to its location, would never be a residential development. As PSTIF could not fund this remediation level above required levels, MBS would be held financially responsible, and was initially not willing to fund the cleanup.</p>
Wal-Mart Inc.	<ul style="list-style-type: none"> - Securing the site for development of a future Wal-Mart store. - Obtaining a land deal with no deed restrictions and no Activity Use Restrictions (AURs) due to environmental contamination. - Minimizing the purchase price of the land. -Although not explicitly cited by Wal-Mart, a potential environmental interest may have played a role.⁹ 	<p>Wal-Mart, with 22 stores in the Kansas City Metro Area, already has a significant presence in the region. However, the highly visible site at the intersection of two major highways makes the land purchase desirable. Should MBS not agree to remediate the site, Wal-Mart could pursue negotiations with other land deals around Kansas City.</p> <p><i>Higher BATNA than MBS.</i></p>	<p>Wal-Mart required site to be remediated to Tier 1 residential RBTLs. This remediation level, though higher than required by the MDNR for the stated development use of the land (commercial), would remove the deed restriction on the land sale and allow the land deed to state no Activity Use Restrictions (AURs).</p> <p>Wal-Mart was unwilling to pay for the cleanup, and viewed it as the responsibility of the land owner, MBS to fund.</p>

⁹ Wal-Mart has been the subject of much negative media and congressional attention, in addition to spawning a number of watchdog-type websites (for example: www.walmartwatch.com). Recently however (and perhaps in response to this negative attention), Wal-Mart CEO Lee Scott has shifted company priorities to include sustainability and environmental concerns. Their website (www.walmartstores.com) details their burgeoning environmental practices. As a result of their new practices and global reach, Wal-Mart is now the world’s largest consumer of organic cotton and seller of organic milk, as detailed in their recent cover story of *Fortune Magazine* entitled “Green Machine”(Gunther, 2006).

Parties:	Interests	BATNA	Positions
Delta Environmental Consultants	<ul style="list-style-type: none"> - Monitoring the abandoned Amoco site to report to their employer (BP) and the MDNR. - Maximizing their profit. 	Not a direct party to the negotiation. Role in the process (as generators of scientific data) was complete prior to negotiations.	No direct position in the negotiation process, however DEC-generated data and reports provided the scientific information upon which decisions were made.
Amoco/BP	<ul style="list-style-type: none"> - Remediating the site to the level required by MDNR regulations. -Minimizing the cost of remediation by securing PSTIF funding for remediation projects. 	As land had already received the NFA letter, Amoco/BP was not responsible for remediation above this level. Therefore, the outcome of the negotiation did not affect Amoco/BP, unless MBS were to attempt to litigate Amoco/BP for the cost of remediation.	No position in the negotiation, as their responsibility for the clean-up had been met during the previous site remediation.
Kingston Environmental Services	<ul style="list-style-type: none"> -Meeting the Tier 1 residential remediation standards requested by their employer (MBS). - Minimizing cost of remediation project. -Minimizing time to project completion. 	Not a direct party to the negotiation, however if negotiation did not occur, Kingston Environmental would lose potential revenue, as they would be the company hired to carry out the remediation.	No position in the negotiation process, however provided counsel to MBS with regards to the interpretation of scientific data and MDNR regulations.
Missouri Department of Natural Resources	<ul style="list-style-type: none"> - Monitoring (through reports submitted by Delta Environmental Consultants) the contamination at Amoco site. - Maintaining and enforcing regulations of residential and non-residential contamination allowances. 	Not a direct party to the negotiation. Outcome of negotiation had no effect on MDNR regulations and ordinances.	No position in the negotiation, however MDNR-determined levels were the crux of the dispute.
Blackwell-Sanders Law Firm	<ul style="list-style-type: none"> -Representing MBS in the negotiations with Wal-Mart 	Not a direct party to the negotiation, however legal counsel provided to MBS was utilized in the decision-making process.	Their position reflected that of their client, MBS.

Discussion

Upon analysis, the most notable aspect of these negotiations was, as Blackwell-Sanders lawyer, Andrew Bailey put it, “From the outset, the 10,000 lb. gorilla in the room was Wal-Mart.”¹⁰ Wal-Mart, as a multi-national corporation with teams of lawyers, environmental consultants, and real-estate advisors, entered the negotiations with a set of well-defined corporate policies and support team. They were already operating 22 retail stores in the Kansas City area, and had researched other sites to purchase, therefore they had a higher BATNA than MBS. Stated Project Manager, David Horn, (of the unique challenges of negotiating with Wal-Mart), “They just research everything so well. It’s not as if you acquiesce to them, it’s that they’ve already thought of it, and their 3-4 law firms have already cranked out documents to support it. You’re just trying to catch up.”¹¹

MBS representatives, on the other hand, were the owners of an ‘economically obsolete’ mall and were interested in attracting Wal-Mart so that the presence of a highly visible retailer such as Wal-Mart would attract other leases. (And it has, as to-date, MBS has entered lease negotiations with McDonald’s, Applebee’s, and Verizon). MBS’ eventual agreement to pay for the remediation of the site to Tier 1 residential standards was driven by their comparatively lower BATNA and their interest in not jeopardizing the lucrative land sale over just this one issue.

In the context of the larger negotiation, the cost of the remediation was not, according to Horn, “a big piece of the pie.” However, examining linkages is a crucial step in the diagnosis of negotiations, as parties’ BATNAs are often strongly influenced by other negotiations- past, present and future (Watkins, 2000). The issue of remediation, as it involves an environmental issue, could have formed a synergistic linkage with other environmental issues on the table. For example, had discussions of environmental responsibility entered the negotiations as a result of this remediation, this may have influenced other agreement components including the provision of adequate stormwater detention, green space, asbestos remediation of the Blue Ridge Mall building, and the recycling of building components after demolition. Also, sequential linkages could have occurred if the outcome of this piece of the negotiation came to affect the negotiations that followed. For example, had MBS felt that they conceded more than was required by law on this aspect, they may have held more firmly on other issues at stake.

¹⁰ (personal communication, December 4, 2006)

¹¹ (personal communication, December 2, 2006)

When asked about the potential linkages with other aspects of the negotiation, Horn responded that, “Environmental issues were a huge component of these negotiations. From an environmentalist’s point of view, the environmental decisions we made would be looked at favorably. We didn’t do it out of concern for the environment, but because it was required by law or more economically favorable. It was a logical thing to do.”¹²

But for Horn, not every decision followed this logical rule, and he left the negotiations feeling unsatisfied as, from his point of view, \$625,000 were left on the table. As the PSTIF funds established by the state of Missouri held a \$1 million insurance policy for use in remediating this particular site, (and only \$375,000 had been used in the initial removal of tanks and cleanup), Horn believed that the remaining funds should be accessible to reimburse MBS for the costs of remediation. However, according to the PSTIF regulations, the moneys cannot be used for ‘non-essential’ cleanups above the MDNR requirements. Horn believed that this puts property owners in the position of being responsible for contamination they did not cause, and denying them the available financial funds to support clean-up.¹³

And Horn wasn’t the only stakeholder who viewed the negotiations as inequitable and perplexing. Although not a direct party to the negotiation, Angela Strain of Delta Environmental Services stated, “This was all very confusing. Wal-Mart had purchased BP-contaminated land before, and had never insisted on cleaning above and beyond the Missouri state RBTLs.”¹⁴ Kingston Environmental Services consultant Debbie McWilliams also noted that the case was unusual, in that normally, the NFA letter would be all that a negotiator in Wal-Mart’s position would want. In her experience, remediating above and beyond the requirements of the NFA made this an atypical case.¹⁵

Both environmental consulting firms, MBS’ environmental law counsel, and MBS negotiators alike questioned Wal-Mart’s insistence on remediating to residential standards, citing the unlikelihood of that piece of land ever being re-zoned as residential. This issue became the major disagreement of the land deal negotiation as according to Horn, “It didn’t make sense to anybody because they could have done the exact same development with accepting the commercial standards, and common sense tells me that the area of that plume could never be residential housing.”¹⁶

¹² (personal communication, November 29, 2006)

¹³ (personal communication, December 5, 2006)

¹⁴ (personal communication, December 4, 2006)

¹⁵ (personal communication, December 4, 2006)

¹⁶ (personal communication, November 22, 2006)

As I was requested not to speak with Wal-Mart about this particular case, I was unable to hear directly from them their motives for their insistence upon this piece of the negotiation. When Strain and her colleagues pressed Wal-Mart for the reasoning behind this new requirement, Wal-Mart's only response was that this was their new stance. Both representatives from MBS and Delta surmised that Wal-Mart insisted on this for purely real-estate and economically motivated reasons. "Wal-Mart just wanted a clean piece of land," said Strain.¹⁷ However, Andrew Bailey, environmental lawyer for Blackwell-Sanders mentioned the possibility of a driving environmental ethic. "It wasn't specifically said that it was environmentally driven, but it was kind of projected that way."¹⁸

At first glance, this case may not seem to offer much for discussion, as the outcome was eventually agreed upon by both parties, and although it stalled negotiations for 6 months, this is a much shorter time period than other protracted multi-party environmental conflicts. However, if unpacked further, this case reveals some basic questions that still remain unanswered for MBS, and contribute to the presiding sentiment expressed by Horn, "...it didn't make sense to anybody.":

- Did Wal-Mart representatives understand fully the definitions of these RBTLs in order to make a wise decision?
- How does the MDNR arrive at these levels for commercial and residential RBTLs?
- Did MBS representatives have enough information to make the most environmentally-sound remediation choice?
- If the environmental interest of Wal-Mart drove this decision, was the best environmental outcome actually achieved?
- As Delta Environmental Consultants were the only scientists providing the monitoring information, is there a possibility that their interests in representing BP affected their reporting?
- As Kingston Environmental was eventually hired to remediate the site, was their advice during negotiations potentially biased?

These questions involve technical information about the remediation process and regulations, but also questions about the roles that the scientific experts did and potentially could have played in the negotiation. From an environmental conflict resolution perspective, it is in this facet of the negotiation that the potential for a more equitable outcome lies.

¹⁷ (personal communication, December 4, 2006)

¹⁸ (personal communication, December 4, 2006)

The Roles of Science and Scientists in Environmental Conflicts

The role of science in environmental conflicts and environmental policymaking has been considered by many scholars (Cullen, 1998; Jasanoff, 1990; Martin and Richards, 1995; Ozawa, 1996, 2005; Steel et. al, 2001, etc.). Ozawa (1996) outlined the many roles that science has historically played as: discoverer, shield, tool of persuasion, and mechanism of accountability. These historical roles, however, have been recognized by many to be inadequate, and various alternatives have been proposed.

Martin and Richards (1995) advocate an integrated approach to conflict analysis, through integrating the various models of science. They propose that this leads to significantly greater insight and explanatory power if the various roles of science are combined in an analysis. While Steel et. al. (2001) argue that the positivist model in which the role of scientists is merely to provide policy-relevant data that others can use to make decisions, is inadequate. They propose that ‘civic science’ in which research scientists are more actively integrated into the process of natural resource management is a more publicly acceptable role for scientists.

Ozawa (1996) proposes that science can actually serve as a tool of facilitation to help resolve environmental disputes. In her article, “Putting Science in Its Place,” (2005), she specifically outlines a system of decision-making which is more congruent with the social nature of scientific knowledge. This system includes recommendations for the regular dissemination of knowledge, the sharing of technical expertise, and the clarification of discretionary scientific results. The training of scientists in mediation techniques has also been posited as one possible solution (Cullen, 1998).

In applying these various scholars’ insights to the MBS/Wal-Mart remediation dispute, it is useful to analyze the roles of the various scientific experts in this case.

The Roles of Scientists and Technical Experts in the MBS/Wal-Mart Dispute

This environmental compliance case involved the dissemination of highly specialized technical information collected by Delta Environmental Consultants and Kingston Environmental Services. In the MRBCA Tier 1 and Tier 2 analyses, contaminant concentrations and characteristics, plume movement, and soil types were characterized and reported to the MDNR. When the need for remediation was recognized, the various remediation techniques, their mechanisms, and functions were communicated.

Although none of the scientific actors (Delta, Kingston, environmental lawyers) were direct parties to the negotiation, all played an information-providing role which helped to shape the process of the negotiations. Through the characterization of their roles, and the information that they shared, important aspects of the negotiation are revealed, including potential conflicts of interest and informational gaps.

According to Angela Strain, an environmental consultant with Delta Environmental Consultants, their role in this case was to monitor the contamination on behalf of BP, and provide their results to the MDNR. Delta Environmental was the only scientific entity charged with generating the reports of the petroleum plume characteristics. Through their reports, they provided the data which allowed the MDNR to issue a NFA letter, as the soils and groundwater were clean enough to pass the Tier 1 non-residential levels. Delta communicated directly with Wal-Mart representatives in the early months of 2005, and communicated with Wal-Mart that they were eligible for the NFA without remediating the site further.¹⁹

The position of Delta Environmental, as the sole provider of data, drew into question their credibility. For David Horn, suspicions existed, as Delta was being paid by (and incidentally, sharing an office with) BP, the original polluters. Angela Strain recognized this apparent conflict of interest, and stated, “I wish that the state could have been involved. They could have at least validated our position.”²⁰

Kingston Environmental Services was the environmental consulting firm hired by MBS. Their role was, according to Debbie McWilliams, to consult with MBS and the MDNR, acting as a “translator for their client.” They educated MBS on the terminology contained in the reports, and helped to demystify terms such as parts per billion, volatile

¹⁹ (personal communication, December 4, 2006)

²⁰ (personal communication, December 4, 2006)

organic compounds, and vadose zones – all terms frequently thrown around in environmental science compliance cases such as this. They did not, however, provide any educational service to Wal-Mart. As McWilliams acknowledged, “The client is really depending upon the environmental company to consult on their behalf. There’s definitely a system. And especially when you start talking about default levels, Tier 1, etc., they don’t know that terminology means. Unless you work with it all the time, these topics are hard to understand.”²¹

However, Kingston’s role as educator was not completely unbiased, as they were only providing information to one side of the negotiation, and would eventually be responsible for the remediation should it be required. This fact caused Horn to question their advice, as their recommendations per the necessity of remediation may have been clouded by their interest in profiting from the job.²² McWilliams also acknowledged this difficulty in her statement that, “There’s a lot of money to be made in excavation and transport of soil. The money is made in the cleanup. The possibility of being scammed exists.”²³

Blackwell-Sanders law firm served as counsel for MBS, and advised about their legal responsibilities per the remediation. From the legal counsel’s point of view, it was incumbent upon MBS to find someone experienced to interpret what the consultants were telling them, and the lawyers believed that they played that interpretive role. Although not environmental scientists, they felt that they did have considerably more knowledge than the negotiators. Said Bailey, “We’re not environmental scientists, but we can understand better than an average businessperson could.”²⁴

The various views and interests of these scientific actors caused Horn and the other MBS representatives to question the scientific information that was shared, and at times to feel “as if everyone was against us, and you just didn’t know who to believe.”²⁵

²¹ (personal communication, December 4, 2006)

²² (personal communication, November 22, 2006)

²³ (personal communication, December 4, 2006)

²⁴ (personal communication, December 4, 2006)

²⁵ (personal communication, November 29, 2006)

Lessons Learned and Recommendations

The scientists and technical advisors in this case clearly played the positivist role, as disseminators of information. They also, at times, crossed over into the role of advocate, counseling the various negotiators as to the appropriate course of action. This created tension between the producers of science (Delta and Kingston) and the users of science (MBS, legal counsel, and Wal-Mart), as the roles of the producers were at times blurred. The scientists' affiliations with their employers caused their credibility to be called into question, and therefore the validity of their information to be doubted. Also, in a case that involved such highly technical information, the producers and users of science were often on opposite sides of a jargon divide as terms such as hydraulic head, MTBEs, and complex recapture technologies were debated (not to mention the inherent abstraction of discussing something measured in parts per billion)! Therefore, the negotiators were left with technical questions unanswered and suspicions as to the ultimate motives of the scientists offering the information.

The need for impartial scientists in environmental conflicts is well-recognized, as evidenced by the many science and technical advisory committees which exist. The Environmental Protection Agency and such well-known projects such as the Chesapeake Bay Program both utilize panels of scientists to resolve this issue of potential role confusion.²⁶ However, for negotiations such as the Wal-Mart/MBS case, where the environmental issue was only one aspect of a larger negotiation, hiring a panel of experts is impractical and costly.

I concur with Ozawa's statement that first and foremost, "access to scientific expertise and analysis must be open to all stakeholding parties" (1996). However, I would add that it is not just access to expertise, but it is access to *impartial* expertise that is crucial. Businessmen and women who are possibly not well-versed in scientific or technical jargon need an independently-funded resource to help them make the most appropriate, well-informed decisions.

When I consulted with Debbie McWilliams about the potential for this impartial role, she replied that, "The closest thing that Missouri has is that the PSTIF adjustors come out onto the site and can validate or refute the information provided by the consultants." However, she also noted that, in cases where the PSTIF insurance adjustors weren't involved, such as this Wal-Mart/MBS case, there is no "check" on the system. She continued,

²⁶ The Scientific and Technical Advisory Committee (STAC) of the Chesapeake Bay programs specifically states that it has worked since 1984 to enhance scientific communication and outreach throughout the Chesapeake Bay watershed and beyond. (<http://www.chesapeake.org/stac/>)

“Property owners just don’t know who they can trust. They don’t know any better, and sometimes end up learning the hard way.”²⁷

The Missouri Department of Natural Resources does have a mechanism of communication between the scientists representing the MDNR and the public. Representatives in the MDNR Ombudsman program, “serve as a point of contact for citizens, businesses and local governments to facilitate communication on environmental protection needs, parks and historic sites, historic preservation and other issues.” Their primary role is to initiate contact with community members to disseminate information, and also to report citizens’ concerns to their regional directors (Ombudsman Program, MDNR, 2006).

I propose that a government-appointed scientist such as an ombudsman could serve the role of impartial advisor in cases such as the Wal-Mart/MBS remediation dispute. Their role could be to serve as translators of environmental regulations, and help to validate or refute the information provided by the other scientific parties. As they would not be employed by any party in the negotiation, they would serve as the “check” that Debbie McWilliams noted was missing. Currently, there are nine ombudsmen serving the entire state of Missouri. Were ombudsmen to expand their role to include the advising of private corporations’ environmental disputes, clearly more scientists would need to be added to the current staffing structure.

It is possible that, in the Wal-Mart/MBS case, even were the information communicated in an unbiased manner, the end result would have remained the same, with MBS paying the cost of remediation. However, I believe that had an impartial scientific ombudsman (or similar position) been present in the negotiations, that many of the non-technical experts’ fears and questions would have been addressed, which in and of itself, is an important goal of conflict resolution.

The real illustrative value of this dispute lies in the fact that hundreds of these cases occur daily around the negotiating tables of corporations worldwide. Decisions which harm or help the environment often rest on incomplete or questioned scientific information, with scientists blurring the lines of information provider, advocate, and employee. By providing an opportunity for businessmen and women to consult with state-appointed, impartial scientists, the jargon and information gap may be bridged to provide for better outcomes for the negotiators, business, and the environment.

²⁷ (personal communication, December 4, 2006)

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