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Successfully Managing Your Environmental Consultant

by Gregory Johnson, PE Greatwood Management Company

It's midmorning on Monday, and I am fielding the typical backlog of messages that were received during my first meeting of the week. One of them is from Client X, a large developer in the middle of an extensive investigation of a property on which they would like to construct a $500 million building. Their project manager is in a panic because their environmental consultant just informed them that there is a need to expand the scope of work and change analytical methodologies. This would significantly increase the analytical costs and could delay their development project by months.

When working with environmental consultants, or contractors of any sort, you need to exercise good management to ensure that the product you receive is applicable for the situation and is cost effective. Here are some typical statements my clients have heard from their consultants and general advice that I give to them.

"We only add a small markup on our subcontractor's invoices."
When selecting an environmental consultant, it pays to review the technical expertise in-house and determine the portion of the work that will be turned over to a subcontractor.

Consultants usually don't aggressively manage the subcontractor's costs. Further, they typically they mark up the subcontractor's invoices by 10 percent or more. However, subcontractor costs can be a wild card. We recommend either determining the subcontractor tasks up-front and contracting for them directly or using a fixed dollar amount as the markup and not a percentage-based system.

"The lacustrine deposits collected via microcores using direct push sampling tubes need to be analyzed by a thermal extraction process to characterize the volatile organic fraction of the subsurface contaminants."
Many clients don't understand technical language, analytical methods and investigation techniques commonly employed on their sites. Ask your consultant to break down the details of the investigation to language you can understand. Don't allow the technical language to intimidate you. Ask the hard questions. If your consultant can't address your concerns in a manner that you are comfortable with, ask someone else to explain it. It is the question that you don't ask that will cost you money.

"The regulators will likely make you take these samples, better to offer them now and not have to be ordered to do them" or "It's better to volunteer to do this analysis to keep the regulators off your back."
Unless you have tried to stonewall the regulators into ignoring the issues on your site, more than likely they will be happy to talk to you about what they are typically looking for in an

investigation. It will be up to your environmental consultant to design an investigation to meet these general expectations or to counter them with scientific or engineering arguments if they feel that the site should not be investigated, remediated or monitored in this fashion. Regulators are typically not out to get you. They have a set regulatory framework that they must work within. Coming up with a reasonable, cost-effective means of obtaining the regulatory goals is the job of your consultant.

"We need to monitor this site on a quarterly basis to better understand and track the contaminant fate and transport."

Here's an example that illustrates why it's so important for a client to understand what a consultant delivers:

A gasoline station had a catastrophic failure of one of its tanks, and with thousands of gallons of gasoline were being lost into the soil and groundwater. An environmental consultant was hired to deal with this. They installed more than a dozen wells and recommended quarterly monitoring. The monitoring continued for almost five years. The price tag of this monitoring ran to more than $20,000 a year in just sampling and analytical costs; reporting and remediation were additional.

Reviewing the groundwater flow maps that were part of each quarterly monitoring report showed that over half of the wells were uphill of the release. The consultant continued recommending quarterly monitoring, and the regulators accepted the recommendations based on the consultant's reputation. Since the client didn't understand the reports, he didn't know what to look for to determine if the recommendations were justified. in terms of the data they presented.

Very few sites need to be monitored this extensively. Typically only one or two of the uphill wells need to be sampled on a regular basis. Further, after the first year or so, provided that the source of contamination has been removed, the groundwater concentrations will stabilize, eliminating a need for monitoring at this frequency.

Critical review of the analytical data can answer many questions. Most of those answers will save you money and time. Make sure that your consultant is reviewing the site-specific data on a regular basis and can justify their recommended monitoring plans.

"This is the industrial standard. All consultants do it this way."

As with a telemarketer, if it sounds too good to be true or just doesn't sound right, don't agree to do it. On-site treatment is a good example. Some consultants will consider themselves experts on a remediation technology, even if they have never used it before. Often on-site treatment of excavated soils is not cost effective when compared to off-site transport and disposal. Understand the basic technologies being used on your site. Ask your consultant for options and their relative costs. Don't settle for a technology that is costly and time consuming and may set your budget and project schedule back.

As for Client X, a number of telephone calls between the client, consultant and regulators resolved the problem. One additional monitoring well was installed, and no change in the analytical methodologies was made. The cost increase was less than $1,500 over the initial

estimate. Through the application of good scientific knowledge, economics, and common sense to the client's project, and by taking the time to analyze the site characteristics carefully, work was limited to what was required to meet regulatory compliance. By planning the work with these methods, and working that plan, the client realizes a significant savings of both time and money.

Remember: The money spent on these projects is your company's money. Soon it will be the consultant's money. It's up to you to figure out who gets what fraction of the environmental compliance budget.

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