DEXTRA REMEDIATION SERVICES – MEASURING

Dextra principals work closely with clients to create customized solutions to an array of environmental business challenges. These challenges are presented by advances in technology, new regulatory and legal requirements, marketplace disruptions and even by the corporation itself. In particular, corporate remediation managers are regularly faced with the need to effectively educate senior business executives, demonstrate progress and defend expenditures. Dextra remediation practitioners have developed an assortment of customized tools to respond to these industry-wide needs. Here are a few examples.

SITE PORTFOLIO PRIORITIZATION TOOL

Background:

This pharmaceutical client needed a methodology for ranking his company's remediation sites, relative to one another, so that resources could be better focused. He was also interested in using this decision support tool to communicate program effectiveness over time to senior management. This paper describes a remediation site prioritization tool that was developed for this client by Dextra. The tool has been in use for the past four years.

Criteria for Development of Tool:
- Results in a tiered ranking of sites based on client-specific perspective on risk
- Incorporates both objective and subjective components (real vs perceived risk, risk vs discomfort)
- Makes effective use of graphics
- Relatively simple to use

The Tool
- The ranking tool is basically an index – a method of replacing a large set of information with an indicator value – applied as a "snapshot" that is repeated annually to reflect changes in that information set over time. In this case, the index is derived from completion of a scoresheet.
- The scoresheet addresses the four subcategories of objective risk that are of most interest to this client: human health exposure, ecological exposure, and reputational and financial risks associated with the closure process.
- Using a simple risk/consequence evaluation, the tool attempts to identify *differentiators* to aid in site ranking (as opposed to a comprehensive evaluation of risk). The scores associated with these differentiators drive the spread of total scores visually.
- There are two parts to the scoresheet. Part I consists of objective statements that deal with the characteristics of the site itself. Part II includes subjective questions that focus on the core or fundamental characteristics of the project, project team and site closure strategy.
- A weighting is embedded in the scoresheet calculator for each of these statements because some risk characteristics result in more significant consequences than others.
- Also embedded in the scoresheet are summed scores for both the controllable and non-controllable aspects of the site and project. This way of looking at the site provides a

different perspective on the ranking process and offers options for evaluating and communicating risk.

The Output

- Site scores are used to generate a "bubble diagram" with objective scores represented on the vertical scale, subjective scores represented on the horizontal scale and current reserve represented by bubble diameter. In this way, overall relative site risk can be viewed graphically and factored into forward planning, and the progress of sites from higher to lower objective and subjective scores (i.e., from top left to bottom right on the diagram) over time can be observed. Other graphic presentations can be derived using subcomponents of the scoring tool (e.g., controllable and non-controllable risk, ecological vs human health risk, etc.).

- Each site falls into one of three tiers based on its relative objective score.
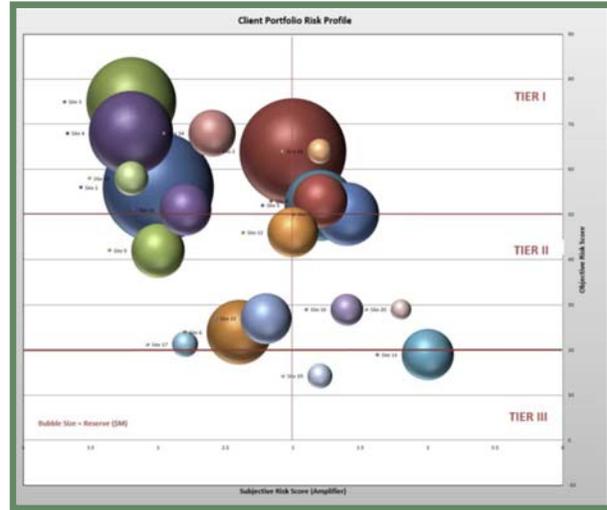
SITE PORTFOLIO PRIORITIZATION TOOL

Background:

This aerospace client needed an approach to measuring actual controllable progress toward closure for its remediation sites to support realistic annual goal-setting and to demonstrate progress within a large "tier" of active sites that will not be closed for many years, generally decades. This paper describes a tool – a site closure progress scoresheet – that was custom-developed to address this client's need and that has been in continuous use for over a decade.

Criteria for Development of Tool:

- Simple and easy to use
- Major closure steps would be reflected in significant changes to a site's score
- Can be implemented immediately

The Tool

- The scoring tool is basically an index – a method of replacing a large set of information with an indicator value – applied as a "snapshot" that is repeated regularly to reflect changes in that information set over time.
- The scoresheet itself is a two-page Excel questionnaire that takes a knowledgeable project manager 5-10 minutes to complete. Site scores are updated by the PMs semiannually.
- In addition to common site remediation steps and milestones, the questionnaire includes various site and regulatory characteristics that reflect the most common barriers to the closure process, and combines results in a way that is sensitive to small status changes.

- Any item that is generally within the PM's control (e.g., mitigating a specific risk) is treated as an additive score component, while an item that is not generally controllable (e.g., site setting) is scored as a multiplicative component.
- As site closure activities are conducted, the score gradually comes down. A drop in a site score indicates that one or more closure milestones were achieved in the time period between the two scoring events.
- The scoresheet is not a ranking tool – i.e., it does not attempt to rank one site against another in terms of the company's risk or liability; it assigns a score that reflects the amount of work that remains to be completed on the site before regulatory closure can be attained.

- The tool has not been designed and is not intended to correlate with forecasted or incurred costs, which are tracked by this client as separate program metrics.
- The tool is used on a fixed set of sites within the portfolio, decided at the outset, to avoid the effect that a new site would have on the overall metric.
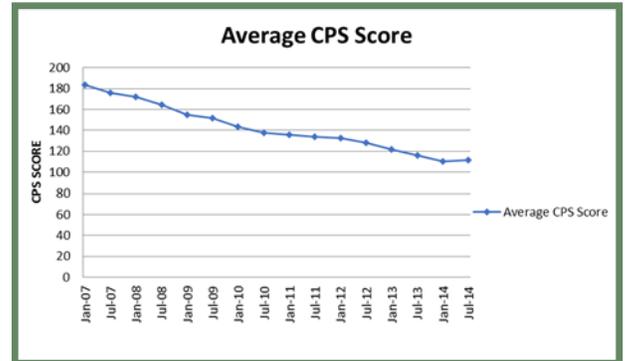
The Metrics
- After each scoring update, the scores for all of the sites in the fixed group are compiled and compared to the previous scoring event. Two separate metrics are tracked as trend graphs: the average CPS score for the fixed portfolio of sites and the number of sites with scores below 75 (a score associated with minimal remaining work required). In addition, scores are compiled for each individual PM's site portfolio to support regular performance reviews.
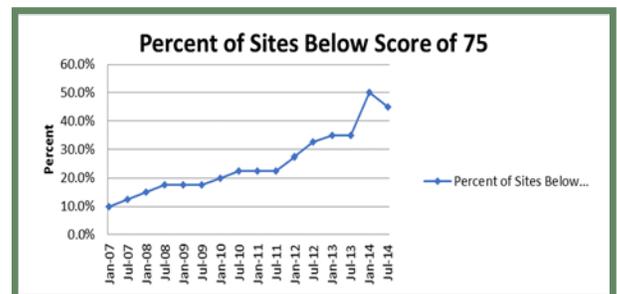
Contact Dextra for more information about customized environmental business solutions, including tools for Evaluating Risk, Decision-making and Communicating.

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