

### “Trust but Verify” in NEPA Contracting

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This newsletter originates from two questionable comments in recent Shipley Group workshops.

The **first comment** comes from a workshop where I had set aside nearly two hours for information about proposed NEPA tasks and their linkage to an agency’s cost estimate for a NEPA contract. When I introduced the topics, a participant volunteered:

**“I leave task descriptions and costs to our contractor. I really don’t have any information on those things!”**

This participant’s comment surprised me. Especially so, because earlier in the workshop we had been discussing how costs for contractor-prepared EAs and EISs had increased significantly. A parallel workshop topic was the agency’s stated desire to finish an EA or EIS in record-setting times. The scope of NEPA tasks directly affects contract costs so how can an agency NEPA practitioner ignore tasks assigned to a contractor?

A **second questionable comment** comes from another workshop. A participant suggested that **an agency’s Statement of Work (SOW) should not be specific, as in page targets or suggested content minimums**. Instead, the participant suggested that if a contractor could cut corners on deliverables, great! Cutting corners was cited as an example of market competition at work, with the contractor having a profit incentive to cut costs by cutting corners. The participant did remark that the agency would have to review and approve shortcuts.

My message to agency NEPA practitioners in this newsletter is this: **Do not trust a contractor to flesh out a vague, sketchy Statement of Work (SOW)**. If you do decide to trust your contractors, be sure they justify their estimates for costs and for times.

Market competition, as the second comment suggested, doesn’t directly influence each NEPA deliverable. NEPA projects are often so complex that the contractor’s total bid is an educated guess as to what the agency will accept as deliverables. Such guesses are the contractor’s fallback strategy when an agency SOW has few stated deliverables or written quality standards. And true competition is not a serious constraint once the agency awards a contract to a single contractor; later negotiations between the contractor and the agency are not concerned with cost efficiency (from a market perspective).

A common agency fallback, lacking a useful SOW, is to give a contractor the last EA or EIS that the agency signed, usually with the caution not to repeat the same errors. No wonder NEPA documents have improved only slowly over the 42 years since Nixon signed NEPA.

**Deferring to a contractor’s task descriptions often increases billed contract costs**, especially if contract deliverables and associated tasks don’t appear in a useful SOW. As a NEPA contractor, I routinely add 10 percent or more to my bid if the agency’s Statement of Work (SOW) is unclear or,

even worse, deliberately vague and incomplete. Similarly, an aggressive schedule requires more staff time, so my bid increases again!

Notice that the preceding pricing cushions are especially important for firm fixed-price bids (a bid approach many agencies choose). In making a firm fixed-price bid, the contractor is expected to stay within the bid total, even if costs change as the agency changes its scope of tasks.

So to repeat my message to agency NEPA practitioners: **Do not trust a contractor to flesh out a vague, sketchy SOW.** If you do trust your contractors, be sure they justify their estimates for costs and for times. And as I explain in recommendation 2 below, remember that some NEPA tasks are inherently agency responsibilities, not topics to be left to a contractor's discretion.

Here is where **verify** becomes relevant. As President Reagan said to Soviet leaders three decades ago, the United States would follow "Trust but Verify" when decisions are important.

I believe that the scope of an agency's EA or EIS is important. Routine EAs realistically cost thousands of dollars. More complex NEPA documents easily cost even more thousands of dollars. Contract costs in the millions are possible for complex and sensitive NEPA projects. A decade ago, an EIS for the British Petroleum North Star drilling project off the North Slope of Alaska cost well over \$20 million.

**Verifying a contractor's task estimates is the only way for an agency to keep contract costs under control.**

Agency contracting officers are hampered if agency NEPA project managers don't provide enough task information for the agency to judge if a contractor's cost and scheduling estimates are reasonable. By default, the agency has to trust the contractor if an agency's NEPA content experts don't get involved in identifying key tasks and then linking tasks to potential contract costs.

Here is a list of my recommendations for managers of NEPA contracts:

1. **Prepare a detailed Statement of Work (SOW) that captures the agency's vision of the projected NEPA tasks for either an EA or an EIS.**
2. **Remember that some NEPA information/decisions are an agency's legal responsibility.**
3. **Translate the SOW deliverables into measurable tasks, expressed in days or weeks of work.**
4. **Use the tasks (from recommendation 3) to calculate an independent government estimate.**
5. **Set clear, written quality standards for major deliverables.**

Later sections of this newsletter reference several other Shipley Group newsletters. These other newsletters are available at <http://www.shipleygroup.com/environmental/index.html?pg=news>. This website has an archive of some 90 prior newsletters.

1. **Prepare a detailed Statement of Work (SOW) that captures the agency's vision of the projected NEPA tasks for either an EA or an EIS.**

**A useful SOW must provide detailed instructions as to NEPA tasks and relevant quality standards.** Without detailed directions, the contractor and the agency project manager will be negotiating expectations for each new task. The contractor is forced to work against a moving target, and often

both the contractor and the agency view the contracting effort as frustrating and inefficient. Cost savings are out of the question because the agency's vision is still changing as the contractor is working on each deliverable.

**A simple example** is the range of alternatives to be analyzed. Some SOWs fail to list the action alternatives. Without a defined list of action alternatives, a contractor does not know how long and complex an EA or EIS is likely to be. In my role as a contractor, each new action alternative likely increases the contract costs at least 20 percent. So with no list of actual alternatives, I routinely increase my bid to cover the unknowns.

So how should a contractor bid a contract with unknown alternatives? As I said on the opening page of this newsletter, I routinely increase my bid estimate to cover unknown tasks and unknown information. So how many added dollars should a contractor include in such an uncertain situation? No universal answers are possible. Each SOW is unique, so contractors have to tailor their contracting decisions to each SOW, no matter how vague and sketchy it is.

**Consider a second simple example.** Suppose the SOW lists the following task: **The contractor shall assist agency personnel to plan and conduct an initial NEPA scoping meeting in Hamilton, Montana.**

This sentence from an SOW looks specific, at least on first reading, but questions are many:

- Will the contractor be responsible for preparing an announcement/newsletter for the planned scoping session?
- Who will hire a hall and arrange for chairs, tables, etc.?
- Will a contractor's employee conduct the scoping session? Who will prepare the graphics for the session—for example, maps and PowerPoint slides?
- Who will record comments from the participants? Will comments be in writing or in a recorded transcript?
- Who will collate and analyze the comments? Will the contractor be responsible for publishing a post-session newsletter responding to comments?
- Who will mail out announcements or newsletters to the public? Other governmental agencies? Native American tribes?

Projected costs for this initial scoping session range from a few hundred dollars into the thousands of dollars. Again, how is a contractor supposed to bid on tasks that are poorly defined or even missing from the original SOW language?

**"Pay me now or pay me even more later."** This adage applies to many NEPA tasks, especially contracted tasks for a NEPA project. As I stated in the opening lines about this first recommendation, provide a detailed, useful SOW or wind up paying more agency time and energy much later. These additional charges cover agency reviews of multiple, evolving drafts, feedback comments on inadequate analyses, and agency rewrites of unacceptable text (to show the contractor what an acceptable deliverable looks like).

An agency's internal staff time sometimes equals or even exceeds the contractor's billed hours on key analyses.

For more detailed information about NEPA contracting see Shipley Group [Newsletter 77 \(November 2010\)](#) and [Newsletter 50 \(April 2006\)](#). An archive of prior newsletters is available at <http://www.shipleygroup.com/environmental/index.html?pg=news>

## **2. Remember that some NEPA information/decisions are an agency's legal responsibility.**

Sometimes agencies inappropriately assign critical NEPA tasks to contractors. Agency NEPA practitioners should remember that some NEPA tasks are inherently agency decisions, not ones to be delegated to contractors.

**What are major conceptual decisions that are best retained by the agency?**

1. Identifying and writing the purpose and need for agency action, especially the links to the agency's legal mission.
2. Describing a detailed proposed action and assessing its potential for resource risk and public controversy.
3. Evaluating and prioritizing scoping information for inclusion in analysis tasks.
4. Developing a range of reasonable alternatives, based on the written purpose and need and associated scoping information.
5. Setting quality standards for a legally adequate effects analysis.
6. Choosing the proposed action or an alternative to the proposed action and preparing a transparent decision document for the chosen action.
7. Allocating funds for activities that support both internal and external (contractual) tasks included in the chosen decision (step 6).

A detailed SOW would include answers to these seven questions and other relevant questions. Remember that the federal agency is responsible for adequate, legally defensible information in any NEPA document: EIS, EA, or Categorical Exclusion. **So agency verification of all contractor shortcuts is essential.**

For more information on the line between agency decisions and tasks assigned to contractors, see Shipley Group [Newsletter 62 \(January 2009\)](#). This newsletter and others are available at <http://www.shipleygroup.com/environmental/index.html?pg=news>.

## **3. Translate the SOW deliverables into measurable tasks, expressed in days or weeks of work.**

This recommendation is the one that is the most difficult for NEPA practitioners to address. But it is the most essential if agency contract specialists are expected to negotiate contract details—tasks, times, and projected costs.

Many agency NEPA practitioners have never thought in terms of assigned hours or days. Consider some of these questions:

- How many days of field work is necessary before a hydrologist can draft a summary of water quality impacts?
- How many days does the actual writing/drafting take?

- How long does it take two or three other contractor employees to review the draft water quality information?
- What if the agency mandates a complete revision of the hydrologist's initial draft? Does this revision require more field work and water sampling?

Note that an accurate contractor's contract cost estimate would take all such questions into account!

A task analysis is usually called a Work Breakdown Structure (WBS). Most WBS analyses are recorded in a spread sheet format, with tasks down one column, assigned workers in the next column, and estimated times filling in the next blank column.

A thorough WBS also leads to a potential schedule for the required tasks.

For a summary of WBS information, see recommendation 3 in Shipley Group [Newsletter 77 \(November 2010\)](#). An archive of prior newsletters is available at <http://www.shipleygroup.com/environmental/index.html?pg=news>.

#### **4. Use the tasks (from recommendation 3) to calculate an independent government estimate.**

The final spread sheet columns in a WBS will record labor pay rates and estimated costs for each task category.

This WBS information then leads to the independent government estimate that contracting officers rely on if they need to assess the validity of a contractor's bid estimates for key tasks.

For more information about costs for NEPA tasks, see Shipley Group [Newsletter 50 \(April 2006\)](#). An archive of prior newsletters is available at <http://www.shipleygroup.com/environmental/index.html?pg=news>.

#### **5. Set clear, written quality standards for major deliverables.**

Written quality standards are essential, both for informal writing assignments and for tightly managed NEPA contracting tasks. Many of my earlier suggestions for drafting a detailed SOW indirectly suggest clear, written quality standards.

Potential quality standards in a NEPA contract are of two types:

- Legal NEPA standards from both the NEPA statute and from the CEQ Regulations
- Documentation standards, especially those parallel to the mandated standards in the Plain Writing Act of 2010

#### **Legal NEPA Standards**

NEPA, as a procedural law, has a number of process standards. An agency and its chosen NEPA contractor must have the same list of standards as a guide for major deliverables.

As an example of a NEPA standard, the contractor's resource experts should arrive at an impact conclusion for any resources of concern (either to the public or to the agency's decision makers). Here is some draft text for a possible standard:

**SOW Standard: Impact projections should focus on clearly identified impact conclusions, based on the context and intensity of the potential impact.**

The conclusion or conclusions should rely on quantified measurements (such as acres affected or the projected density of native plant species). All quantified values need to be interpreted as to whether the projected impacts are **negligible, minimal, moderate, or major**. (Writers should choose one of these judgment words for each impact projection.) Text should then provide a chain of evidence for why the quantified projections are judged to be negligible (or one of the other judgment words). Writers should avoid the judgment words “significant” and “non-significant” in both an EA or an EIS; these two legally sensitive words should be limited to the FONSI (for an EA) or the Record of Decision (for an EIS).

Note: Impact projections should not be recorded using pluses, minuses, shaded circles, or numerical ratings. All of these are legally undesirable.

See the NEPA review checklist attached to this newsletter. Shipley consultants recommend using this checklist as a guide for reviewing an EA or EIS for compliance with the NEPA statute standards. This same checklist would serve as a useful reminder that each of the 21 listed legal standards potentially needs to be discussed, if only briefly, in a detailed SOW.

### Documentation Standards

Clear writing is both a legal NEPA standard and a federal legal standard under the Plain Writing Act of 2010.

Many of the earliest case law decisions on NEPA compliance addressed the need for NEPA documents to be clear and readable (both the general public and for the agency decision maker). The Plain Writing Act of 2010 reinforces these early case law decisions.

Agency NEPA practitioners have often been disappointed with written text from a contractor. But consider that many NEPA contributors are wildlife biologists, environmental planners, hydrologists, and so on. Such resource folks are often not skilled technical writers. Problems with writing are why Shipley Group has been presenting Clear Writing for NEPA Specialists in a 3-day format; we now have a webinar version of the same course.

What would be a possible writing standard? Here is an example:

**SOW Standard: Move key information up and left in your NEPA documents—to the openings of chapters, sections, paragraphs, and sentences.**

Remind technical specialists to highlight key conclusions and other crucial information by changing its position within the text. The traditional report often ended with a summary. Some 40 years ago, Executive Summary began to appear on the opening page of reports. Next, published chapters began to open with a preview box. Increasingly, technical documents of all sorts open with major conclusions and content previews.

The Shipley Clear Writing and Right Writing workshops both provide tools for making text much more readable. The preceding writing standard is just one of a number of major writing standards (many of which are still evolving, based on the changing constraints of web publications).

For more information on the Plain Language initiative, see Shipley Group [Newsletter 81 \(June 2011\)](#) and [Newsletter 82 \(July 2011\)](#). An archive of prior newsletter appears at <http://www.shipleygroup.com/environmental/index.html?pg=news>.

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Please see attachment; ***NEPA Summary Score Matrix***

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## NEPA Summary Score Matrix

### [EA/EIS Name] Scores\*

Criteria	Score						
	0	1	2	3	4	5	6
1. Comply with NEPA?							
2. Comply with CEQ Regulations?							
3. Comply with relevant Executive Orders?							
4. Define clearly the need?							
5. Define clearly the purpose (objectives)?							
6. Define clearly the issues?							
7. Identify measurement indicators?							
8. Identify relevant significance thresholds?*							
9. Track the issues throughout the document?							
10. Define clearly the no-action alternative?							
11. Define clearly the action alternatives?							
12. Do the action alternatives fulfill the need?							
13. Describe clearly the affected resources?							
14. Predict effects of the no-action alternative?							
15. Predict effects of the action alternatives?							
16. Compare the effects of all the alternatives?							
17. Analyze cumulative effects?							
18. Treat properly mitigation and monitoring?							
19. Written well and in plain language?							
20. Use appropriate graphics?							
21. Substantiates public involvement?							

**\*Scoring Code:**

- 0 = no or missing
- 1 = yes, but very ineffective
- 2 = yes, but ineffective
- 3 = yes, but only somewhat effective
- 4 = yes, but moderately effective
- 5 = yes, and very effective
- 6 = yes, and extremely effective

\* For some impacts significance thresholds already exist. For example, both the Clean Water Act and the Clean Air Act have established discharge limits. Such limits are de facto significance thresholds under NEPA because a Federal agency cannot plan to violate a Federal law. Such a violation would be a significant impact under NEPA. However, many other impacts do not have clear thresholds of significance; in these instances, agencies must analyze possible impacts (both their context and intensity). Then using context and intensity information, an agency decision maker decides if impacts are clearly non-significant or likely to be significant. The decision maker's legal findings about possible significance are then recorded in a Finding of No Significant Impact (or optionally, the decision maker decides that an EIS is the proper NEPA compliance process).