

**APPENDIX H – REVISED MAKE OR BUY PLAN**

(See Modification A077)

**CH2M HILL HANFORD GROUP, INC.**  
**MAKE-OR-BUY PROCESS**  
**February 21, 2003**

**1.0 INTRODUCTION**

The Make-or-Buy Process for CH2M HILL Hanford Group, Inc. (CH2M) establishes the steps to determine if a work activity can be or must be made in house or bought from qualified subcontractors. The process provides the framework for make-or-buy decisions based on requirements contained in Department of Energy Acquisition Regulation 970.5215-2. The key principle is to provide a process that focuses on performing the work activity with a preference for least cost. However, this does not compromise best value principles addressed in the Federal Acquisition Regulations, maintaining CH2M core competencies, and adhering to other contractual agreements. This Make-or-Buy Process also identifies CH2M contract characteristics, core competencies, and senior leadership participation. This process is prepared as a one-time action and will be effective for the term of contract DE-AC27-99RL14047, which meets Clause I-109 requirements. CH2M senior management will review the process annually to ensure that it reflects current conditions and will make changes as appropriate.

The Make-or-Buy Plan is Attachment 1 to the Make-or-Buy Process, and provides the categorization of each work scope into Must Make, Must Buy, or Can Make or Buy. The Make-or-Buy Plan is the road map for the CH2M planning managers during the Make-or-Buy decision process. When work scope is identified, the planning manager will review the Plan to determine categorization of the work item. If the work item is a "Must Make," the planning manager will allocate CH2M resources to the activity with no further action required. If the item is categorized as a "Must Buy," the activity will utilize subcontractor resources. The "Can Make or Buy" categorization is when the planning manager will complete a Make-or-Buy Decision Form to determine the appropriate path for resource identification and allocation.

CH2M will review and provide the overall Make-or-Buy Plan (Attachment 1) to ORP on an annual basis. This document will be controlled through a revision number and an associated revision date.

**2.0 DEFINITIONS**

**Must Buy Work Activity** – A work activity to be performed by an outside source including a subcontractor or other federal contractor.

**Core Competencies** – Critical or unique capabilities that *must be* performed by CH2M and are considered essential to serving the customer, preserving continuity of work, and maintaining cost-effective programmatic and management control. Core competencies are eliminated from the make or buy process.

**Must Make Work Activity** – A work activity to be performed by CH2M using its personnel and other resources.

**Planning Manager** – The manager directly responsible for planning the work activity.

### 3.0 CONTRACT CHARACTERISTICS

The very nature of CH2M's performance-based contract with the DOE Office of River Protection meets the intent of a Make-or-Buy Plan. CH2M earns fee by performing quality work in a cost-effective manner. Therefore, development of productivity initiatives is an ongoing activity. The contract incentivizes CH2M to accomplish more for less by saving money that can then be applied to further accelerate tank closure and waste retrieval activities with the potential to earn additional fee. Additionally, CH2M is required by contract to outsource 60 percent of its obligated funds [Section H.9 (b)]. The Site Services Agreement identifies work activities to be performed by a DOE-designated contractor on the site. However, CH2M received contract direction in December 2002 indicating the U.S. Department of Energy, Office of River Protection is eliminating the Site Services Manual reference from the CH2M contract. This direction allows CH2M to freely pursue changes as to how site services are provided to optimize mission acceleration objectives and minimize tank farm infrastructure cost. CH2M has established teams that will analyze work activities currently performed by other Hanford Site contractors to determine if it is most effective to self perform or joint contract; or to pursue outsourcing initiatives led by Fluor Hanford.

CH2M is small in funding and in its number of employees when compared to most other DOE prime contractors. Therefore, CH2M has developed a simplified Make-or-Buy Process that takes into consideration its contract characteristics, as well as its limited resources.

### 4.0 CORE COMPETENCIES

#### 4.1 Identifying Core Competencies

Core competencies are those work activities eliminated from the make-or-buy decision process because they are designated critical or unique activities that CH2M must self perform (*must make work activities*). Core competencies are identified by CH2M senior management and are communicated to CH2M personnel. The following questions are among those asked by senior management when identifying core competencies:

1. Is this an area where CH2M needs to establish/retain a leadership position by maintaining critical skills and/or essential facilities?
2. Is the work inherently a CH2M function?
3. Has it been stipulated by a customer that the work be performed in-house?
4. Does the work involve proprietary information, CH2M intellectual property, technology transfer and/or research advancement issues, which have to be handled in-house?
5. Would acquisition from an outside source disrupt or delay an essential project?
6. Are there unique labor concerns in existing collective bargaining agreements?
7. Would outsourcing this work activity violate a Prime Contract, Bargaining Unit Agreement, and/or Regulatory Agreement?
8. Would performance by a subcontractor subject CH2M to unacceptable risks? (e.g., does the work constitute a potential hazard to the public, employees, and/or the environment, which could result in a serious threat or emergency situation?)
9. Is there little likelihood that there would be an operational improvement or cost benefit realized if performed by an outside source?
10. Is there no satisfactory outside source?

#### 4.1.1 Non-Cost Considerations Used to Identify Core Competencies

Non-cost considerations are those that are specific to the major work activity, difficult to quantify, and are significant in their impact on operations. The following list of non-cost issues are also taken into consideration when determining core competencies:

- Potential business/political ramifications
- Employee impact
- Retention of corporate knowledge base
- Impact on CH2M strategic objectives
- Socioeconomic goals
- Other strategic issues

#### 4.2 CH2M Core Competencies

Following are CH2M Core Competencies:

- Executive Management
- Strategic Planning and Integration\*
- Tank Farms Facility Management and Operations\*
- Core Sampling\*
- Licensing and Project Integration\*
- Unreviewed Safety Question (USQ) & Plant Review Committee (PRC) Administration\*
- Authorization Basis Maintenance and Configuration Management\*
- Environmental Compliance\*
- Quality Assurance\*
- Quality Control
- Radiation Control Program\*
- Industrial Safety\*
- Industrial Hygiene\*
- Chief Engineer
- Design Authority\*
- Cognizant Engineering\*
- Process Engineering\*
- Program Baseline Management\*
- Prime Contract Management and Administration
- Subcontract Placement and Administration\*
- Financial Management\*
- Legal and PAAA\*
- Human Resources\*
- Industrial Relations
- External Communications\*
- Chief Information Officer
- Emergency Preparedness\*
- Waste Management\*

\*Policy setting activities are core competencies; can *make or buy* support activities.

## **5.0 SENIOR MANAGEMENT PARTICIPATION**

Senior management participation is a principle that the CH2M Make-or-Buy Process will maintain. Participation will be at the Plan approval level and the review of specific Make-or-Buy studies completed during this process. Senior management representation during the CH2M Make-or-Buy Plan review will consist of the Vice President of Projects, the Chief Financial Officer, and the Director of Procurement and Contracts. Final approval of the Make-or-Buy Plan will reside with the Chief Financial Officer. This involvement will occur annually as work scopes are categorized into Must Make, Must Buy, or Can Make or Buy. This review is essential in maintaining the strategic element of the work scope categorization while addressing our contractual commitments with ORP. As part of this approval process, annual “global” assessments will be selected from the plan for certain functions and/or organizations. A Make-or-Buy study as outlined in this process will be accomplished on the selected items. Any further involvement at the work package level by CH2M senior leadership would not allow the process to be effectively implemented on a “real-time” basis as work scopes are being planned and implemented.

In summary, the Make-or-Buy Plan (Attachment 1) will be the resulting document that receives senior management approval. Any changes to the Plan would require CH2M senior management and ORP approval.

## **6.0 WORK PLANNING PROCESS**

The CH2M planning process defines the work scope, schedule, and cost data necessary to perform and control work activities. When the work is defined from a technical and schedule standpoint, detailed schedules are developed and the activities are resource loaded from information contained in the Cost Estimate Input Sheets. Adjustments are made to level resources and constrain schedule activities to meet schedule and budget constraints imposed on the project. During these work definition and resource adjustment processes, make-or-buy decisions are made by the planning manager. A Make-or-Buy Decision Form is included in this process document and identifies established criteria and the threshold for use.

## **7.0 MAKE OR BUY CRITERIA**

The key to successful establishment of a make-or-buy plan is the development of program specific make-or-buy criteria. These criteria are to be used to assess work activities included in CH2M’s Make-or-Buy Process and to determine the appropriateness of CH2M’s make-or-buy decisions. Make-or-buy determinations are time consuming and costly and will be limited to work activities that exceed \$1,000,000, and where a change in sourcing is feasible and holds promise for improvements in value or cost.

Management believes the effectiveness of CH2M make-or-buy decisions are realized in the quality, timeliness, and cost-effectiveness of CH2M’s performance in managing, operating, and closing the tank farms. Work activities outside of core competencies and whose scope exceeds \$1,000,000 will be subject to the make-or buy-decision process. It is important to note that all work scopes will account for the same requirements (e.g. Prime Contract requirements, Bargaining Unit Agreements, etc.) in the planning stages, however, the level of documentation required for work scopes that exceed \$1,000,000 will not be required for smaller value work scopes.

Following are among the criteria taken into consideration when enacting a make-or-buy decision:

- Core competencies
- Collective bargaining agreement

- CH2M affiliate expertise
- Directed sources
- Least-cost alternatives
- Need to exert direct control over schedule and/or quality
- Unsatisfactory vendor/subcontractor performance
- Periods of significant growth or decline in workload
- Client-driven new products or services

### **7.1 Considerations that Favor Make Decisions**

- Cost (less expensive to perform in house)
- Desire to integrate operations
- Productive use of capacity and staff to assign overhead costs to projects
- Need to exert direct control over schedule and/or quality
- Unreliable or untested vendors/subcontractors
- Desire to maintain a stable work force (in slow periods)
- Proprietary nature of work
- Maintaining internal expertise or capability for safety, quality, or performance requirements.

### **7.2 Considerations that Favor Buy Decisions**

- Vendors' or subcontractors' research, expertise, or specialized know-how
- Cost (less expensive to buy)
- Limited or scarce internal expertise, capacity, equipment or facilities
- Socioeconomic/subcontracting goals, community participation, marketing and client issues
- Desire to maintain a multiple-source policy
- Small project, product, or service need
- Desire to maintain a stable work force (in growth periods)
- Indirect managerial control and risk considerations

See Attachment 1 for major work activities and the outcome of current CH2M make-or-buy decisions.

## **8.0 LEAST COST ANALYSES**

If, after completion of the Make-or-Buy Decision Form, a *Must Make* or *Must Buy* determination cannot be reached, a least cost analysis will be requested by the planning manager. Cost estimators will perform the least cost analyses. Cost estimators will develop a cost basis for both internal resources as well as the cost of outsourcing the work activity. Costs may be developed based on incurred costs, on-site labor rates, or other resources that provide a reasonable and consistent basis for the estimate. Least cost analyses will consider all costs associated with producing or managing the work activity.

## **9.0 PRODUCTIVITY IMPROVEMENTS**

The recent contract modification required CH2M to significantly accelerate closure of the Single Shell Tanks with the same funding levels. As this challenge continues to evolve, development of productivity improvements is a very important, ongoing activity. Productivity improvements are identified, evaluated and implemented using the baseline change request (BCR) and funds change request (FCR) processes as appropriate, and are tracked to successful achievement. Current technical and management strategies and

associated requirements will continue to be challenged in order to improve productivity and efficiency while accomplishing intended end results.

## **10.0 EMPLOYEE IMPACT**

Potential for employee impact will be considered as part of the determination. The impact will identify the number and classification of potentially displaced employees. Consideration will be given as to how the impact can be minimized. Some common techniques include:

- Placing displaced employees in existing job openings for which they are qualified.
- Retraining displaced employees for existing job openings when the training can be accomplished in a reasonable time. Retraining programs will be designed to provide occupational skills that are in demand by CH2M or by other employers locally, regionally, or nationally.
- Recommending displaced employees be hired first by the selected subcontractor.

## **11.0 MAKE-OR-BUY DECISIONS**

If a clear *Must Make* or *Must Buy* determination cannot be made by the planning manager, the decision will ultimately be made by the CH2M senior manager to whom the planning manager reports. The senior manager will consider core competencies, information contained in the Make-or-Buy Decision Form, any least-cost analysis provided to him or her, employee impact, and discussions with other senior managers when making the decision.

## **12.0 DOCUMENTATION**

If the make-or-buy decision process results in a *make* determination, relevant documentation created during the decision process will reside with the planning manager. If the make-or-buy decision process results in a *buy* determination, a copy of all relevant documentation created during the decision process will be provided to the Procurement organization. The buyer responsible for awarding any resultant contract will retain the documentation in the contract file.

## CH2M HILL MAKE-OR-BUY DECISION FORM

### APPLIES TO “CAN MAKE-OR-BUY” CATEGORIZED WORK SCOPES OVER \$1M

MAKE-or-BUY CRITERIA	YES	NO	BASIS
1. Is the work a core competency?  If YES, do work in-house. If NO, continue to next question.			
2. Has it been stipulated by our customer that the work be performed in-house?  If YES, do work in-house. If NO, continue to next question.			
3. Is the product or service constrained by requirements pertaining to labor laws in the Prime contract and/or bargaining unit agreements?  If YES, do work in-house (or obtain work turndown). If NO, continue to next question.			
4. Do environment, health, and safety considerations preclude an outside source from providing the function?  If YES, do work in-house. If NO, continue to next question.			
5. Would a buy decision result in loss of CH2M personnel with essential technical expertise?  If YES, do work in-house. If NO, continue to next question.			
6. Is this a critical skill (e.g., difficult to obtain) to the Hanford site?  If YES, do work in-house. If NO, continue to next question.			
7. Would procurement from an outside source disrupt or delay an essential program?  If YES, do work in-house. If NO, continue to next question.			
8. Does the work involve technology transfer and research advancement issues that require the work scope to be accomplished by CH2M resources?  If YES, do work in-house. If NO, continue to next question.			
9. Can the product be leased or the service performed by temporary employees (<900 man hrs)  If YES, subcontract work scope. If NO, continue to next question.			

MAKE-or-BUY CRITERIA	YES	NO	BASIS
10. Does a competitive market exist, which has the ability to maintain quality and performance?  If YES, subcontract work scope. If NO, continue to next question.			
11. Would developing alternate supply sources or dual sources provide added flexibility for contracting in emergencies and/or handling peak workload requirements?  If YES, subcontract work scope. If NO, continue to next question.			
12. Do potential contractors have necessary expertise to treat, store, or dispose of hazardous, radioactive, & mixed waste generated at the tank farms in a safe, environmentally sound manner, & comply with applicable laws, regulations & agreements in a cost-effective manner?  If YES, subcontract work scope. If NO, continue to next question.			
13. Is it necessary to outsource work to small businesses to meet socioeconomic goals?  If YES, subcontract work scope. If NO, continue to next question.			
14. Will a substantial capital investment be required before CH2M can make the product or perform the service?  If YES, continue to question 15. If NO, continue to question 16.			
15. Can the additional equipment and facilities be used on other projects?  If YES, continue to question 16.			
16. Can the work be performed in-house for less cost than an outside source? (Contact Cost Estimating to perform least-cost analysis.)  If YES, do work in-house. If NO, subcontract work scope.			

**RECOMMENDATION:** \_\_\_MAKE \_\_\_BUY \_\_\_FURTHER ANALYSIS REQUIRED

**Evaluator's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_