

CONSTRUCTION INDUSTRY INSTITUTE

# PROJECT MATERIALS MANAGEMENT PLANNING GUIDE

Texas A & M University Materials Management Task Force

> Source Document 27 June 1987

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#### PREFACE

This report is a source document of the Construction Industry Institute, and, in addition, is a chapter in the Project Materials Management Handbook. The Handbook will be published incrementally starting July 1987. Individuals and companies reviewing this report should request a copy of the Handbook from the Construction Industry Institute if they are not already on automatic distribution. The instructions and Table of Contents of the Handbook are explained in that document.

#### ACKNOWLEDGEMENTS

This report was prepared by a subcommittee of the Materials Management Task Force. The following members wrote the report and assisted by editing and reviewing the text:

Glenn Dodd, Brown & Root, Inc. (Team Leader) Norman Nunn, Fluor Daniel Edward Ischy, Houston Lighting & Power G.S. Fitzgerald, ARCO Oil & Gas Co. George Stukhart, Texas A&M University

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#### PROJECT MATERIALS MANAGEMENT PLANNING GUIDE

#### 1.0 INTRODUCTION

#### 1.1 General

The cost of materials represents more than half of the total cost of today's typical capital project. Lack of materials when needed at the job site is typically the single most frequent cause of construction delays. Given the impact on cost and schedule, it is easy to see the positive influence that effective materials management can have on the cost of construction.

Research conducted by the Construction Industry Institute indicates that adequate planning may be the single most important determinant of effective project materials management.

#### **1.2** Purpose of the Planning Guide

The primary purpose of this planning guide is to promote the development of a project materials plan. It is designed to be used by the owner, engineer, and constructor, or other participants in the construction process for any type project or contractual arrangement.

Before project materials planning can begin, it is important to understand the basic philosophy of materials management. Project Materials Management should be thought of as a process rather than an organization. In fact, the activities of the materials cycle cross all organizational lines of the project and begin with the specification of the material which is primarily the responsibility of the owner and engineer. The materials cycle, as illustrated in Figure 1, continues on through installation and startup in the field. Recognition of this process is essential in planning the integration and management of the materials function.

#### 1.3 How to Use This Planning Guide

This Planning Guide consists of two basic parts:

- a. A narrative discussion of the various considerations to be taken into account in planning the materials function.
- b. An outline which is intended to be used as the basis for development of the actual written materials plan for any given project.

The narrative is not a set of instructions for completing the outline but rather a discussion of the normally significant factors which must be considered in the development of a plan. The outline is intended to prompt the documentation of the functions, systems, requirements and facilities that constitute the specific plan for a project. Obviously, the best developed plan is useless unless communicated to the participants at all levels of the project. The outline is intended to aid in this purpose.

Use of this guide will not result in procedures for the detailed activities of the materials management function, but rather the establishment of the framework within which detail procedures can be developed and subsequently carried out.