GUIDELINES FOR

QUALITY MANAGEMENT PLANS

ON HOUSING PROJECTS

JUNE 2011
1. **INTRODUCTION**

In 2010 the Department approved the Quality Assurance Framework. The Framework encouraged quality management in housing projects in order to ensure that the quality of houses built (top structures) are not compromised. It also emphasized the need for statutory compliance to ensure quality such as enrolment with NHBRC, building materials must be SABS compliant etc.

Quality on projects should start at the establishment phase, by establishing the correct project brief and scope and it flows through all phases of the project up to project approval and project close out. An important principle of quality is that benefits derived from the quality system must outweigh the cost of establishing and running the system. These benefits will include customer satisfaction. The approach to quality planning will be determined by the quality policy or quality management plan that has been adopted at the beginning of the project. A poorly developed quality plan will compromise the performance on a project.

The ISO 9000 standards relate to the development of quality management systems and are designed to help organizations ensure they meet the needs of customers and other stakeholders. ISO 9001 focuses on the basic requirements that are required for a quality management system which include the following.

- Requirements for the quality management system and documentation;
- Management responsibility, focus, policy, planning and objectives;
- Resource management and allocation;
- Product realization and process management; and
- Measurement, monitoring, analysis and improvement.

2. **PROBLEM STATEMENT**

The Department has experienced poor quality of work in a number of housing projects. Due to poor quality there are a large number of projects where rectification (rework) is undertaken. The cost of rectification projects has proven to be expensive and wasteful expenditure. It has also resulted in fewer new projects being approved and as a result the department has assisted fewer beneficiaries.
3. POLICY OBJECTIVES

The purpose of this guideline is to:

- assist with the development of a quality management plan for housing projects that will be undertaken;
- ensure that quality is an integral part of every housing project;
- reduce rework on housing projects;
- ensure compliance with norms and standards; and
- ensure that houses meet the satisfaction of beneficiaries (customers).

4. GUIDELINE FOR A QUALITY MANAGEMENT PLAN

A quality management plan for each project must be submitted together with the application for project approval. The guideline serves to assist applicants and officials in respect of the minimum content requirement.

4.1 SCOPE OF PROJECT

The project must be defined in terms of what is the purpose or objective of the project, the contracting strategy and the subsidy programme that will be used to implement the project. It must also include the number of units that will be delivered. It must be indicated which aspects of the project will be implemented through the Expanded Public Works Programme (EPWP). Should any variations to the project be required what will be the process and who will be responsible or mandated to make such decision(s).

4.2 BUDGET

The Implementing Agent must ensure that the budget for the project is approved. It must be indicated what can be done within the budget and should there be any budgetary constraints these must be highlighted. There must also be an indication of who will be paid, when they expect to be paid and the documents that will be submitted for the respective claims. Should there be any reasons for variation orders the process to be followed and the roles and responsibilities of the persons involved.

4.3 PRODUCT SPECIFICATION

The product that will be delivered must be specified in terms of size, finishes such as fascias boards, tiled roofs etc. and this includes the services that will be delivered with the top structure.
4.4 MATERIALS

A bill of quantities of the building materials must be included indicating the quality of materials to be used and when and how sample tests will be undertaken. A procurement plan stating when, how materials will be procured and it must include estimated costs of materials. The procurement plan must be aligned to the project timelines as per the development plan.

4.5 PROCEDURES

The quality management procedures that will be used to implement the project must include the following.

- The inspections that will take place and at which stage(s).
- The checklists that will be used to ensure that there is compliance.
- Quality control testing on building materials.
- Quality control testing, reviewing results.
- Tracking of construction deficiencies and ensuring timely corrective measures.
- Quality control report

4.6 ORGANIZATIONAL STRUCTURE

An organizational structure of the company and the resources that will be allocated to the implementation of the project must be included. The organizational structure must clearly indicate the lines for reporting and communication. Included must be details in respect of the following.

- Who is the top management of the company
- The financial capacity of the company
- Credit rating
- CiDB grading
- NHBRC registration/status
- Personal liability cover
- Indemnity insurance applicable to the project
- Brief overview of the implementation strategy
- In the case of a joint venture (JV) who is involved in the partnership and details of the roles and responsibilities of each company in the JV.
4.7 RESOURCES

All resources that will be used to implement the project must be outlined i.e. financial, equipment and human resources.

The financial resources will be linked to the project budget. (Refer to paragraph 4.2)

There must be an inventory of equipment that will be used and it must also be indicated to what extent the equipment will be used and the percentage of work that will be labour intensive.

There must be a detailed organizational structure of the resources that will be used to implement the project. It must include the designation of each person and functions of the respective persons.

4.8 TIME-FRAMES

The project must have a development programme which is realistic and achievable. It must include the intervals at which inspections and/or quality control checks will be undertaken.

4.9 COMMUNICATION STRATEGY

There must be clear lines of communication which must include the following.

- Roles and responsibilities
- What will be reported and to whom
- Frequency of on-site meetings and standard agenda items
- who will maintain the records of the meetings
- how will the minutes of the meetings be circulated

4.10 REPORTING

It must be clearly indicated who will be responsible for the quality audits, what they will be auditing, who will be responsible for ensuring that any deficiencies or shortcoming are corrected and who will be responsible for closing out at the end of each stage.

4.11 RISK MANAGEMENT

It is important that there be a risk management plan for any risks that may arise on the project. The potential risks must be identified and a strategy to mitigate the risk must be outlined. It must also include who will be responsible for implementing and monitoring the plan and to whom they will be reporting on the progress of plan.
5. **MONITORING AND EVALUATION**

The Project Management Chief Directorate must monitor and evaluate the quality management plans that are submitted for each housing project and ensure that there are no deviations from the said plans. The Inspectorate Division of Project Management must ensure that quality standards are maintained so that the houses built meet the needs and satisfaction of beneficiaries.

The Monitoring and Evaluation Directorate must monitor the number of units that have been rectified each financial year due to poor workmanship and quality of materials.

The Product Development Directorate will monitor and evaluate the implementation of the policy guidelines after 3 years to determine whether the policy objectives have been realized and to make recommendations on policy enhancements.
### Checklist for a Quality Management Plan

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<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td>Scope of project</td>
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<tr>
<td><strong>2</strong></td>
<td>Budget</td>
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<td><strong>3</strong></td>
<td>Project Specification</td>
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<td><strong>4</strong></td>
<td>Materials: Bill of quantities, product and specification  Procurement plan</td>
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<td><strong>5</strong></td>
<td>Procedures: Inspections  Checklists  Quality control testing on building materials  Quality control testing review of results  Tracking of deficiencies and timely corrective measures  Quality control report</td>
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<td><strong>6</strong></td>
<td>Organizational structure: Identify top management  Financial capacity of company  Credit rating  CIDB grading  NHBRC registration/status  Personal liability cover  Indemnity Insurance  Overview of implementation strategy  Joint venture: partners and their roles and responsibilities</td>
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<td><strong>7</strong></td>
<td>Resources: Financial  Human  Equipment</td>
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<td><strong>8</strong></td>
<td>Time-frames: Development programme</td>
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<td><strong>9</strong></td>
<td>Communication strategy: Roles and responsibilities  What will be reported and to whom  Frequency of meeting and standard agenda items  Who will maintain the record of meetings  How will the minutes of the meeting be circulated</td>
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<td><strong>10</strong></td>
<td>Reporting: Quality audits: What will be audited, when and by whom  Identify corrective action that will be undertaken and by whom</td>
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<td><strong>11</strong></td>
<td>Risk Management: Risk management plan  Revised plan</td>
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<td><strong>12</strong></td>
<td>Scope Management: Product specification  Delivery time frame  Authority to change specification  Nature of change  Record keeping</td>
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