

## Project System Audit Subcontractors on Site

**Note:** Not all items of the checklist shall be checked. It depends on the status of the work and whether it is the first, second or third audit.

### 1. Project Definition

- 1.1** Has an acknowledgment of the PO been received by Company?
- 1.2** Have Company's latest issues of specifications and drawings been made available?
- 1.3** Have any SC queries been resolved?
- 1.4** Has the applicable scope of work / services for the subcontractor been defined?
- 1.5** Has the SC's safety plan been reviewed and approved?
- 1.6** Has the SC's Quality/Inspection plan been reviewed and approved?
- 1.7** Has SC's organization chart been accepted by Company and does this chart reflect reality?
- 1.8** Are international and/or local codes/norms/standards applicable?
- If so, where have they been listed and are copies with the subcontractor?
- 1.9** Are client/Company/subcontractor's construction practices/procedures applicable and to be used?
- 1.10** Have job related internal instructions been developed by Company and issued to the subcontractor?
- 1.11** If client's/Company's/subcontractor's standards/ details/forms, etc. must be used:
- a. are these documents available with the subcontractor?
  - b. are they technically acceptable for this type of job?
  - c.

Checklist	Remarks	Action (X)
<p><b>1.12</b> What is the availability of reports/records on:</p> <ul style="list-style-type: none"> <li>• manpower on site?</li> <li>• progress?</li> <li>• planning?</li> <li>• nonconformances?</li> </ul>		
<p><b>2. Job Control</b></p>		
<p><b>2.1</b> Has SC's progress curve been accepted by Company?</p>		
<p><b>2.2</b> What progress measurement system is used on the job?</p>		
<p><b>2.3</b> Have weight factors been assigned and what has been the basis?</p>		
<p><b>2.4</b> Has the total S/C scope been divided in activities?</p>		
<p><b>2.5</b> To what extent and how are manhour expenditures administered against activities?</p>		
<p><b>2.6</b> What is the latest physical progress reported?  State reporting date.</p>		
<p><b>2.7</b> What was at that time the relationship between spent and planned manhours?</p>		
<p><b>2.8</b> Has the manpower curve been accepted by Company?</p>		
<p><b>2.9</b> How does the final expected manhours requirement relate to the originally estimated manhours?</p>		
<p><b>2.10</b> Were any problems experienced in:</p> <ul style="list-style-type: none"> <li>• obtaining the right number of people?</li> <li>• mobilization?</li> <li>• obtaining the right quality of people?</li> <li>• performance of people?</li> <li>• changes in manpower due to external reasons?</li> <li>• quality and safety performance in</li> </ul>		

Checklist	Remarks	Action (X)
<p style="text-align: center;">general?</p>		
<p><b>2.11</b> Have any EWA's been approved? If yes, has the impact been reflected in S/C's progress measurement system/data base?</p>		
<p><b>2.12</b> What is the quality and frequency of communication/coordination with the Company Construction Management team?</p>		
<p><b>2.13</b> Is there a detailed planning agreed upon with Company?</p>		
<p><b>2.14</b> Have planned milestone been met in time?</p>		
<p><b>2.15</b> How are scope/quantity increases incorporated in the subcontract?</p>		
<p><b>3. Document/Data Control</b></p>		
<p><b>3.1</b> Are checkprints and/or masterprints of documents available?</p>		
<p><b>3.2</b> Are previous issues of documents kept with the subcontractor?</p>		
<p><b>3.3</b> How are redundant issues marked?</p>		
<p><b>3.4</b> Is a list of received/prepared drawings maintained?</p>		
<p><b>3.5</b> Is a transmittal file maintained for documents received from Company?</p>		
<p><b>3.6</b> Is a transmittal file maintained for documents issued to Company?</p>		
<p><b>3.7</b> How is it ensured that available supplier prints (supply and erect order only) are accepted without comments by Company?</p>		
<p><b>3.8</b> Are latest issues of documents available at the work location?</p>		
<p><b>3.9</b> How is it ensured that void documents are removed from the work location?</p>		
<p><b>3.10</b> Are the subcontractor's computer programs used for this project, acceptable to Company?</p>		
<p><b>3.11</b> If so, are computer calculations</p> <ul style="list-style-type: none"> <li>• checked/approved?</li> <li>• numbered?</li> </ul>		
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Checklist	Remarks	Action (X)
<b>3.12</b> To what extent are alternative calculations made?		
<b>4. Site EH&amp;S</b>		
<b>4.1</b> Is S/C's EH&S plan available?		
<b>4.2</b> Has Company's EH&S plan (including rules and regulations) been made available?  Has client's EH&S plan been made available?		
<b>4.3</b> Who has been appointed as subcontractor's EH&S representative?  What are his qualifications?  Is this a full-time or part-time function?		
<b>4.4</b> What is the frequency of EH&S meetings and which level of personnel shall attend?		
<b>4.5</b> What is the frequency of toolbox meetings being held?		
<b>4.6</b> Is an attendance list for toolbox meetings being maintained?		
<b>4.7</b> Is there evidence of safety reports (first aid, incident/accident reports and statistics) being sent to Company?		
<b>4.8</b> Who issues personal protective equipment, clothing, etc.?		
<b>4.9</b> Who is watching consistent use and proper application of this equipment/clothing?		
<b>4.10</b> Has a site emergency evacuation procedure been issued?  Have all S/C employees been informed about the details?  How are meeting points and siren signals made known to subcontractor personnel?		
<b>4.11</b> Has all S/C labor attended a safety induction meeting?		
<b>4.12</b> Have safety rules/regulations been issued to all individuals?		

Checklist	Remarks	Action (X)
<p><b>5. Inspection/Test Records</b></p> <p><b>5.1</b> Have Company/client hold/witness points been agreed?</p> <p><b>5.2</b> Have authority/third party hold/witness points been agreed?</p> <p><b>5.3</b> Have inspection/test records to be used been agreed upon?</p> <p>Have these been included in subcontractor's Quality Plan?</p> <p><b>5.4</b> Are the forms filled out as the work progresses and not activity completion?</p> <p><b>5.5</b> Are forms properly authorized by:</p> <ul style="list-style-type: none"> <li>• subcontractor?</li> <li>• Company?</li> <li>• Third party?</li> </ul>		
<p><b>6. Installation/(Shop) Fabrication</b></p> <p><b>6.1</b> Are procedures available and accepted by Company for:</p> <ul style="list-style-type: none"> <li>• transfer of color coding and heat numbers?</li> <li>• pre / post heat treatment?</li> <li>• hydrotesting?</li> <li>• NDT</li> </ul>		
<p><b>7. Welding</b></p> <p><b>7.1</b> Have welder qualifications been checked?</p> <p><b>7.2</b> Were any requalifications required?</p> <p><b>7.3</b> Have the Weld Procedure Specification (WPS) and Weld Procedure Qualification (WPQ) been reviewed and agreed upon?</p> <p><b>7.4</b> Are base welding consumables properly controlled?</p>		
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<ul style="list-style-type: none"> <li>• quivers (&gt;70 °C)</li> <li>• baking (300 °C for 2 hours)</li> <li>• storage (120/150 °C)</li> <li>• re(issuing) (max. 3x)</li> <li>• handling</li> </ul>		
<p><b>7.5</b> Who reviews the X-ray film:</p> <ul style="list-style-type: none"> <li>• subcontractor?</li> <li>• Company?</li> <li>• NDT subcontractor?</li> <li>• authority?</li> <li>• client?</li> </ul>		
<p><b>7.6</b> Is Company authorized to over-rule authority?</p>		
<p><b>7.7</b> Are NDT reports signed and stamped?</p>		
<p><b>7.8</b> Are image quality indicators being used?</p>		
<p><b>7.9</b> What date/numbering system is being used?</p>		
<p><b>7.10</b> Are photos taken before or after stress relief?</p>		
<p><b>7.11</b> How are welds being identified?</p>		
<p><b>7.12</b> Are evaluation criteria (HP 5/3) referred to in the NDT report?</p>		
<p><b>7.13</b> How is the traceability of films versus welds organized?</p>		
<p><b>8. NDT</b></p>		
<p><b>8.1</b> Have qualifications of assigned personnel been verified?</p>		
<p><b>8.2</b> How are test results recorded?</p>		
<p><b>8.3</b> Are reports properly signed and stamped?</p>		
<p><b>8.4</b> Is NDT being subcontracted?</p>		
<p><b>8.5</b> Has Company approved the NDT approach?</p>		
<p><b>8.6</b> Is tested equipment/material being stamped?</p>		

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<p><b>9. Miscellaneous</b></p> <p><b>9.1</b> Is a construction dossier agreed upon/maintained (in accordance with the SC requirements).</p> <p><b>9.2</b> Are calibration records of measuring and test equipment maintained?</p> <p><b>9.3</b> Are personnel qualification records maintained?</p> <p><b>9.4</b> Are construction equipment inspection records maintained?</p> <p><b>9.5</b> What has been agreed upon about the close out of the SC?  Are records handed over to Company?  Is a punch list procedure used?  Is an acceptance note being signed?</p> <p><b>9.6</b> Have the authority requirements been established,?  Which authorities are involved?  Which documents have to be submitted for approval and by whom?  Is sufficient time allowed for presentation and approval time?</p> <p><b>9.7</b> Is it expected that the subcontractor needs the services of consultants for special items?</p> <p><b>9.8</b> How is it ensured that S/C receives all relevant internal Company instructions?</p> <p><b>9.9</b> What action is being taken if an instruction is technically not sound or in conflict with other project requirements?</p>		