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**Form 2178-LIP Instructions**

**WARNING:** Form 2178-LIP is not for on-site construction activities. It is used for work not yet performed and for onsite work that has not been offered for acceptance. Work that has been performed and is nonconforming should be submitted in accordance with the applicable nonconformance process.

**PURPOSE**

The purpose of the Subcontractor Deviation Disposition Request (SDDR) process is to document, disposition, review, and reject or approve deviations to subcontract requirements. This SDDR form (Form 2178-LIP) is used for activities related to the procurement of items or services.

This SDDR process also identifies LANL actions resulting from subcontractor deviation such as the identification of changes to LANL design documents, identification of changes to the project baseline, and SDDR closure requirements.

Subcontractors use this form to

* Notify LANL when the subcontractor wants to propose changes to the subcontract unanticipated at time of award,
* Notify LANL when a manufactured product will not meet subcontract requirements and to document the subcontractor’s proposed action together with their technical justification, or
* Notify LANL upon failure to meet requirements of Design Agency reviewed subcontractor submittal documents.

**APPLICABILITY**

This SDDR form is applicable to the procurements of engineered, custom (not off-the-shelf) and/or non-custom structures, systems, or components (SSCs) or technical services.

Form 2178-LIP may serve as a design revision control document for procurement actions only, not for on-site facility construction activities. It is not a substitute for Requests for Information (RFI), Field Change Requests (FCRs), or Design Revision Notices (DRNs).

**PRECAUTIONS AND LIMITATIONS**

Obtain the latest version of this alternate form from the Engineering Standards Program Home Page, [LANL Engineering Standards](https://engstandards.lanl.gov/index.shtml).

LANL engineering actions and disposition statements do not relieve the subcontractor from responsibility for the accuracy, adequacy, or suitability of the item being provided as defined in the subcontract, nor does it constitute a waiver of the terms of the subcontract.

The SDDR is not a vehicle for granting variances from LANL institutional documents; if SDDR disposition requires variance from an institutional document then LANL engineering must follow the variance process of the appropriate institutional document.

Submittal of SDDRs from lower-tier subcontractors must be through the subcontractor.

**GENERAL**

This SDDR form is referenced within LANL Engineering Standards Manual Chapter 1 Section Z10 Attachment F, *Specifications*, for use with procurements of equipment, materials, and technical services, and by AP-341-519, *Design Revision Control* as an accepted change mechanism*.*

Web-based tools or other electronic processing tools may be used in place of this form. Any web-based tool or electronic system must be approved by the LANL Engineering Services Division Office management. The web-based tool or electronic systems must comply with all salient features of this process and must include the same reviews and approvals.

**Instructions for the Subcontractor**

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| SECTION 1.0 SUBCONTRACTOR’S REQUEST FOR DEVIATION FROM CONTRACTUAL REQUIREMENTS | |
| This section must be completed by the subcontractor. | |
| Field | Subcontractor Entry |
| 1.1 | Subcontractor enters document number by which they track the project documentation. |
| 1.2 | Subcontractor enters the date on which the SDDR is submitted to LANL. |
| 1.3 | Subcontractor enters their organization name, point of contact name, and telephone number. |
| 1.4 | Subcontractor enters the order number, item number as applicable from the drawing, catalog, internal specification, etc., and the supplied item or service name or description. |
| 1.5 | Subcontractor enters the LANL subcontract number, LANL procurement specialist's (PS) name, and LANL subcontract technical representative's (STR) or Administrative STR name. |
| 1.6 | Subcontractor enters the date the deviation was discovered and the discovery method (e.g., vendor information, design/constructability review, material availability, etc.) |
| 1.7 | Subcontractor lists previously submitted SDDRs for same or similar deviations. |
| 1.8 | Subcontractor enters the method (email, fax, letter, etc.) used to notify LANL STR or PS. |
| 1.9 | Subcontractor describes the subcontract deviation and defines the extent of the condition for each identified item or service affected. Include quantities and serial, lot, batch, heat, or other numbers as appropriate. Identify the location of the deviating characteristics by drawing coordinates or specific location, as applicable. Reference and attach reproducible-quality drawings, sketches, photographs, etc. as appropriate.  When proposing a change in either subcontractor or LANL documents, describe the change in detail. Identify the documents including title or subject, date and revision, and where appropriate, attach a copy of the areas in question. Subcontractor is to identify the design package (e.g., DCF) impacted by the SDDR. |
| 1.10 | Subcontractor enters Rough Order Magnitude (ROM) cost impact in US dollars to the Subcontract that would result from the proposed changes. |
| 1.11 | Subcontractor enters ROM schedule impact in weeks to the Subcontract that would result from the proposed changes. |
| 1.12 | If the Subcontractor needs a response to the deviation request to prevent the discontinuation of fabrication activities within the next two weeks, then identify as an expedited request by checking “Yes”, otherwise check “No”. If “Yes” is checked, provide a need by date. |
| 1.13 | Subcontractor describes the proposed action that the subcontractor intends to take and provides technical justification. Where appropriate, provide justification for cost/schedule impacts.  Attach legible copies of supporting documentation. Provide adequate supporting documentation to allow LANL personnel to assess the impact that the deviation has on the fit, form, function, and quality of the item or service. |
| 1.14 | Subcontractor identifies the affected subcontractor documents (e.g., drawings, specifications, procedures, installation instructions, testing instructions) and the nature of changes that may be needed to the documents. |
| 1.15 | Subcontractor enters name, title, telephone number, and date of the subcontractor’s authorized representative. |

The subcontractor submits the form to the LANL STR or LANL PS as defined in the contract documents.

The subcontractor must maintain copies of all SDDR forms and include them in the quality assurance documents required by the subcontract.

**Instructions for LANL Personnel**

Upon receipt, the STR, PS or PE logs the SDDR and assigns a unique SDDR number per the project document control plan. The STR, PS or PE enter the SDDR number and date received at the top of page 1. Sequential numbering is the preferred method, but an alternative SDDR number generator is available at SDDR Central (accessed from CoE’s Eng Doc Numbering [utility](https://coe.lanl.gov/APs/DocNum/SitePages/Home.aspx), directly [here](https://coe.lanl.gov/xprg/Pages/SDDRv2.aspx)).

The form and any supporting documentation are then forwarded to the LANL project engineer (PE), design engineer (DE), or procurement technical subject matter expert (P-TSME) for engineering disposition and review/approval by affected technical organizations.

Prior to approving any SDDR, LANL personnel must consider the impacts to cost, schedule, and ability of the item or service to perform its intended functions.

**Responsibilities**

The project engineer is the engineer assigned by LANL Engineering Management as the single point of contact for engineering design activities.

The design engineer is the representative of the Design Agency/engineer of record (EOR) who is responsible for the technical content of the procurement documents.

The design verifier (DV) is a competent individual other than the individual who performed the original design (i.e., the original deviation request). The design engineer may perform the role of design verifier if they did not participate in the development of the subcontractor’s request for deviation and did not develop a design solution for the deviation request.

Quality subject matter expert (QSME) review and concurrence is required when the SDDR is associated with a quality requirement. Examples include Design Specifications, Quality Assurance Plans, Quality Procurement Requirements, CGD Related Requirements, or Non-Conformance Reports (NCRs). The QSME is a person reporting directly to the IQPA Division and designated/assigned as a Laboratory quality assurance engineer, Laboratory quality assurance specialist, etc., to provide QA support to a facility, project, or group; or a person reporting to another organizational unit who has demonstrated competence and expertise in the interpretation and application of DOE QA requirements and national QA consensus standards as determined by responsible management.

The facility design authority representative (FDAR) is the LANL design authority responsible for the project design.

The STR is the individual who performs technical oversight of the subcontract and may be an administrative subcontract technical representative (AdSTR). STR training and responsibilities are defined in LANL procedure [P850](https://int.lanl.gov/policy/documents/P850.pdf), *Subcontract Technical Representative*.

The Procurement Specialist (PS) is a representative from Acquisition Services Management (ASM) who performs subcontract administration responsibilities. PS training and responsibilities are defined in [P850](https://int.lanl.gov/policy/documents/P850.pdf).

| SECTION 2.0 LANL EVALUATION AND DISPOSITION | |
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| LANL project engineer is responsible for managing completion of Section 2.0. | |
| **Field** | **Entry Information** |
| 2.1 | The DE or PE enters the project identification number, LANL Design Change Form (DCF) Number and the project title, if applicable. |
| 2.2 | The DE or PE checks the appropriate box for management level of the affected item or provides an alternate quality level designation. |
| 2.3 | For nuclear facilities, the DE or PE checks the functional classification box for the affected item. For nonnuclear facilities, check “NA” box. |
| 2.4 | The DE or PE checks the proposed disposition box. For a “Rejected“ disposition, obtain project engineer (Field 2.9) signature and subcontractor technical representative (Field 2.12) signature, and place an “N/A“ in Fields 2.5 (Disposition and Justification), 2.7 (LANL Actions), 2.8 (design engineer), 2.10 (QSME), and Section 3.0 (SDDR Closure). Where required by the project, obtain FDAR signature in Field 2.11, otherwise indicate N/A. |
| 2.5 | For accepted deviations, the DE or PE evaluates the deviation request and develops actions and a technical justification. When changes to LANL drawings, specifications, requisitions, or other LANL documents are involved, each document is identified and the change is described in detail. The DE attaches supporting documentation as needed.  ***Note: The changes to LANL design documents must be completed per AP-341-519 Design Revision Control.***  The DE lists the document number, revision, title, and description of change for each design document released with the SDDR. Insert additional rows, if necessary.  The DE provides the revised or marked-up documents. On each affected page or sheet, clearly show the before and after condition of the proposed change when practical. Cloud drawings changes and note SDDR number next to each cloud. Add change bars to text documents and note SDDR number next to each change bar. |
| 2.6 | the DE or PE enters the reason for the deviation and SDDR Complexity. |
| Code  Title of Code | Description |
| RC-01  Design Correction | The design is not adequate, cannot be installed, or cannot be made operational.  The design does not fulfill the requirements documents or scope of work. If LANL’s contract requirements are not being met within the current design and at least one change is required to ensure compliance. The design is incomplete or does not provide sufficient detail.  Errors in the design prevent procurement, fabrication, erection, testing, or acceptance.  Information provided by vendor/subcontractor requires modification of design. Information from vendor/subcontractor should have been known during design. *Note: RC-03 should be checked if information is new and would not have been known during design.* |
| RC-02  As-Found Condition Different | Actual field conditions are different than anticipated. Client-supplied documentation was incorrect, could not previously have been accessed, or limited access was available. This includes interference with embedded commodities. |
| RC-03  Construction / Fabrication Convenience | Design is adequate and correct; however, changes were requested because of physical limitation, schedule constraints, and/or material unavailability not defined when the original design was issued.  Facilitate modification of vendor/subcontractor-provided material or components to address unavailable material or components, late shipments, vendor or vendor documentation deficiencies, bill-of-material discrepancies, or other similar vendor/subcontractor issues.  Hardware, equipment, or system configuration is not installed in accordance with the design requirements but is judged to be functionally and operationally acceptable. *Note: If the actual condition reflects non-conformance or deficiency in accordance with the applicable NCR procedure, then an SDDR shall not be used in lieu of an NCR.*  Issued design has an associated NCR that has been or will be determined as a “Use-As-Is” or “Repair” that will require design revision. |
| RC-04  LANL Requested Change | Changes were requested to improve maintainability, operability, and/or ergonomics.  LANL’s Subcontract requirements have been updated and are not currently being met by design.  A perceived need is not currently in any technical, regulatory, or nuclear safety baselines or contract. However, rigorous engineering evaluation has been validated and system engineers have concurred that the perceived need must be met in order to achieve mission success, or the need must be met in order to comply with state or federal law. Design information must be added or changed because of LANL request. |
| RC-05  Part Substitution | Issued design must be changed because of changed conditions (such as unavailability of product, regulatory changes, or unavailability of required warranty terms). |
| RC-06  Project-Specific Code | The PE and the engineering manager may elect to have a set of project-specific trend codes that may facilitate improvements. These codes will be defined and kept in the PE’s project records and shared with the project team. If RC-06 is checked, a project-specific trend code number and title must be included in section 2.6. |
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| 2.7 | **LANL Actions:**  The DE evaluates the effect of the deviation on the project design and procurement documents and lists affected document numbers.  The DE checks all applicable boxes.  The PE manages any actions related to Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) determinations, price adjustments, baseline changes, and coordination with other affected subcontractors.  For hazard category 2 & 3 nuclear facilities, accelerators, or in high-hazard nonnuclear facilities, SDDRs that modify the design require USQD/USID by a LANL Qualified Evaluator (QEV). USQD is completed per SBP-112-3 and USID is completed per SBP113-3. The FDAR may allow off-site work to continue while the USQD/USID is being processed.  The DE identifies “Other” follow up actions such as the need for additional calculations, drawings or sketches, inspections, testing, etc. |
| 2.8 | The DE enters their name, Z number, organization, signature, and date to indicate that the change is correct, complete, and meets project requirements. The DE may perform the required design verification if they are competent in the technical area affected by the deviation and did not originate the proposed deviation.  IF the DE and/or PE determine that other groups or organizations need to review the deviation or if a separate design verification is required, THEN the PE distributes the SDDR to affected groups and/or design verifiers, collects and resolves comments, and obtains approval(s).  IF the PE determines that the deviation has a significant impact to project cost, schedule or subcontractor’s contract, THEN the PE can distribute the SDDR to the associated Project Manager (PM) and/or PS for their approval(s).  Have the additional reviewer(s) sign in the additional signature block(s) once concurrence is recieved. If no additional groups or organizations need to sign Field 2.8, mark the additional signature blocks with an N/A. |
| 2.9 | The PE manages completion of Field 2.9.  The PE enters their name, Z number, organization, signature, and date to signify that affected LANL groups and Design Agency personnel have evaluated and concurred with the SDDR disposition and justification. The PE may add additional lines to field 2.8 and obtain signatures therein. |
| 2.10 | The QSME enters their name, Z number, organization, signature, and date evaluates the deviation, disposition, and justification to verify that appropriate quality requirements and standards are specified.  QSME signature is required when the SDDR is associated with a quality requirement. Examples include Design Specifications, Quality Assurance Plans, Quality Procurement Requirements, CGD Related Requirements, or Non-Conformance Reports (NCRs). For SDDRs where quality requirements are not affected, this field can be marked N/A. |
| 2.11 | The FDAR enters their name, Z number, organization, signature, and date to signify they have evaluated and concur with the SDDR disposion, justification, design verification, and review by affected groups or organizations.  The FDAR enters the USQD/USQI number, when applicable. The FDAR notes whether work may continue in parallel with the USQ/USI process.  For ML-4 subcontracts outside of nuclear facilities, radiological facilities, accelerators, and high-hazard nonnuclear facilities, the FDAR may elect to be omitted from the SDDR process. (*Note: This approach is consistent with other engineering change processes.*) |
| 2.12 | The STR or AdSTR enters their name, Z number, organization, their signature and the date to signify concurrence with the dispostion. STR/AdSTR then forwards the SDDR to the subcontractor, including Project Manager and ASM representative in SDDR approval distribution |

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| SECTION 3.0 SDDR CLOSURE | |
| 3.0 | Section completed as part of LANL closeout activities. Not required when submitting back to subcontractor. |
| 3.1 | Responsible engineer enters information indicating LANL or Engineer of Record (EOR) design change documentation required to incorporate the change as outlined in the SDDR. |
| 3.2 | Responsible engineer signs once SDDR changes are confirmed to be initiated in follow-on change documentation. |

**DOCUMENT CONTROL AND CLOSURE REQUIREMENTS**

The project engineer (PE) maintains SDDRs and an SDDR log in the project files. At the completion of the procurement activity, the PE manages the SDDR closure process. The PE verifies that

* Subcontractor actions identified in fields 1.13, 2.5, and 2.7 are complete,
* LANL actions identified in fields 2.6 and 2.7 are complete,
* Changes are incorporated into project as-built documentation,
* For SDDRs with Field 2.4 Proposed Disposition “Accepted”, RE completes Section 3, and
* Completed SDDRs are submitted to the responsible organization’s document control.

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| **BY LANL UPON RECEIPT:**  SDDR No.: |  | Date Received: |

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| Instructions for Subcontractor: | | | | | |
| 1. Notify LANL subcontract technical representative (STR), or LANL procurement specialist (PS) if no STR, within 5 working days after identification or detection of proposed deviation. 2. See attached instructions for completing and processing this form. 3. Attach additional supporting information whenever necessary. | | | | | |
| 1.0 SUBCONTRACTOR’S REQUEST FOR DEVIATION FROM CONTRACTUAL REQUIREMENTS | | | | | |
| 1.1 Subcontractor’s Document No.: | | | 1.2 Date Submitted: | | |
| 1.3 Subcontractor Information (*Name, Point of Contact, and Telephone Number*) | | | | | |
| 1.4 Subcontractor Order Number: | Subcontractor Item No: | | | Item Name: | |
| 1.5 LANL Subcontract No.: | LANL Procurement Specialist: | | | LANL STR / AdSTR: | |
| 1.6 Date Deviation Discovered: | Method of Discovery: | | | | |
| 1.7 Previous SDDR Submittals for Same or Similar Issue: | | | | | |
| 1.8 LANL STR or PS Notified By: | Email | Fax | | Letter | Other: |
| 1.9 Description of Deviation: | | | | | |
| 1.10 Cost Impact of Proposed Deviation: | | | 1.11 Schedule Impact of Proposed Deviation: | | |
| 1.12 Expedite Deviation Request  Yes  No Need by date: | | | | | |
| 1.13 Proposed Action and Technical Justification: | | | | | |
| 1.14 Associated Subcontractor Document Change(s): | | | | | |
| 1.15 Subcontractor’s Authorized Representative: *(Name, Title, Telephone Number, and Date)* | | | | | |

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| 2.0 LANL EVALUATION AND DISPOSITION | | | | | | | | | | | | | | | |
| 2.1 Project ID: | | | DCF# | | | Project Title: | | | | | | | | | |
| 2.2 Affected SSC Management Level: | | | | | ML-1 | | | ML-2 | | | ML-3 | | | ML-4 | |
| Or other quality level designation: | | | | | | | | | | | | | | | |
| 2.3 Affected SSC Functional Classification | | | | | SC | | | SS | | | OHC | | | NA | |
| 2.4 Proposed Disposition | | | | Accepted | | | | | | Rejected | | | | | |
| 2.5 Disposition and Justification: | | | | | | | | | | | | | | | |
| Design Documents Included with SDDR: | | | | | | | | | | | | | | | |
| Document No. | | Rev. | | Document Title | | | | | Change Description | | | | | | |
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| **2.6 Reason for Deviation and Complexity:** (reason code descriptions are included in this document instructions) | | | | | | | | | | | | | | | |
| Design Correction (RC‑01) | | As-Found Condition Different (RC‑02) | | | | | Construction Convenience (RC‑03) | | | | | LANL Requested Change (RC‑04) | | | |
| Part Substitution (RC‑05) | | Project-Specific Code (RC‑06) | | | | | | | | | | | | | |
| 2.7 LANL Actions: | | | | | | | | | | | | | | | |
| USQD/ USID Required | Yes  No | | | | | | | Other Subcontractors Affected | | | | | Yes | | No |
| Drawing Change | LANL | | | Subcontractor | | | | Price Adjustment | | | | | Yes | | No |
| Specification Change | LANL | | | Subcontractor | | | | Baseline Change | | | | | Yes | | No |
| Other: | | | | | | | | | | | | | | | |
| 2.8 Design Engineer: *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |
| Other *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |
| Other *(Name, Z Number, Organization, Signature and Date) add additional signature blocks as necessary.* | | | | | | | | | | | | | | | |
| 2.9 Project Engineer: *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |
| 2.10 Quality Subject Matter Expert: *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |
| 2.11 Facility Design Authority Representative: *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |
| USQD/USID No. (when required):  Subcontractor may proceed while USQD/USID is being processed.  Yes  No  NA | | | | | | | | | | | | | | | |
| 2.12 Subcontract Technical Representative/AdSTR: *(Name, Z Number, Organization, Signature and Date)* | | | | | | | | | | | | | | | |

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| 3.0 SDDR CLOSURE | | | | |
| 3.1 Require follow-on change documentation: | None | FCR | DRN | As Built |
| Other (specify): | | | | |
| FCR/DRN Number(s) Incorporating SDDR: | | | | |
| 3.2 Responsible Engineer: (*Name, Z Number, Organization, Signature, Date*) | | | | |