**RECORD OF REVISIONS**

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| --- | --- | --- | --- | --- |
| **Rev** | **Date** | **Description** | **POC** | **RM** |
| 0 | 9/17/2014 | Initial issue. Supersedes forms associated with Section I Rev 3. | Ari Ben Swartz, *ES-EPD* | Larry Goen,  *ES-DO* |
| 1 | 4/15/2015 | Removed signatures from forms and incorrect citations from FM10 | Ari Ben Swartz,  *ES-EPD* | Larry Goen,  *ES-DO* |

**Contact the Standards POC for upkeep, interpretation, and variance issues.**

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| **Chapter 17** | [**Pressure Safety POC and Committee**](http://engstandards.lanl.gov/ESM_Chapters.shtml#esm17) |

This document is online at <http://engstandards.lanl.gov>

**Pressure Safety Forms FM01 - FM10**

1. The appended forms are samples, provided to illustrate the minimum information required[[1]](#footnote-1).
2. The information shall be managed as a record and must comply with LANL P1020-1 *Laboratory Records Management*, and P1020-2, *Laboratory Document Control*. Normally this information will be placed in the PSCS database and then EDMS.
3. Any spreadsheet-based or individual Word forms posted online with this chapter may be used in lieu of these samples.

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| FM01 | Pressure System Certification Status Form |
| FM02 | PRV Recall Summary Sheet |
| FM03 | Code Non-Compliance Log |
| FM04 | Minor Non-Compliance Log |
| FM05 | Flexible Pressure Element Visual External Examination |
| FM06 | Tubing and Piping Data Sheet |
| FM07 | Pressure System Component List |
| FM08 | Relief Device Placement Verification Record |
| FM09 | Thrust Consideration Data Sheet |
| FM10 | System Schematic |

Additional direction on how the forms are used, and what is specifically required to document a pressure system, is provided in the following attachments to ADMIN-1:

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| ADMIN-1-2 | Form Directions |
| ADMIN-1-3 | Existing (Legacy) Pressure System Documentation Requirements |
| ADMIN-1-4 | New Pressure System Documentation Requirements |

| **Pressure System Certification Status Form**  (Place this form in pressure system documentation package when completed) | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| System ID No.: |  | | | | | | | | Excluded System: | | Yes  No | |
| Other System Identification Name (or Number): | | | | |  | | | | | | | |
| System Location (TA-BLDG-Room): | | | -      -      (Not applicable if mobile) | | | | | | | | | |
| Mobile System “T” Number: | | | | (Not applicable if mobile) | | | | | | | | |
| System Contents (N2, AR, etc.): | | | | (Do not list if Classified) | | | | | | | | |
| System Fluid Category ( FS1, FS2, FS3 ): | | | |  | | | | | | | | |
| System Design Pressure: | | | |  | | | | | | | | |
| System Design Temperature Minimum | | | |  | | | | | | | | |
| System Design Temperature Maximum | | | |  | | | | | | | | |
| PRD Set Pressure(s) | | | |  | | | | | | | | |
| Applicable ASME B&PVC Section for System: | | | | |  | | Applicable B31 Code for system: | | | | |  |
| System Owner: |  | | | | | | | Phone/Pager: | |  | | |
| Last Re-certification (MM/DD/YY): | | |  | | | | | | | | | |
| Next Re-certification (MM/DD/YY): | | |  | | | | | | | | | |
| Reviewer Name: | | |  | | | | | | | | | |
| Notes: | | |  | | | | | | | | | |
| Approval Signature List: | | **Printed Name & Z # Signature Date** | | | | | | | | | | |
| FOD PSO Certification | |  | | | |  | | | | | |  |
| CPSO Certification | |  | | | |  | | | | | |  |

| **PRV Recall Summary Sheet** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| System Name and ID No.: | |  | | | | | | | | |
| **Pressure Relief Device Component Number** | **Manufacturer** | | **Model Number** | | **MAWP (PSIG)** | **Set Pressure (PSIG)** | Test date | **Due Date** | **PRV Test Lab Report #** | **Flow check procedure or Calculation Number** |
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| **Code Non-Compliance Log\*** | | | | | |
| --- | --- | --- | --- | --- | --- |
| System ID No.: |  | | | | |
| System Description |  | | | | |
| Page       of | |  | | | |
| **Description** | | | **Code Requirements**  **(Section, Chapter & Paragraph)** | **Closure & Rationale** | **Closure date & LANL PSO Signature & Z #** |
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**Minor Non-Compliance Log[[2]](#footnote-2),[[3]](#footnote-3)**

| System ID No.: |  | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| System Description |  | | | | | |
| Page       of | |  | | | | |
| **Description** | | | Requirement **(LANL Document, Section & Paragraph)** | **Closure & Rationale** | **Closure date & Initials** | |
| **Owner** | **FOD PSO** |
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| System ID No.: | |  | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date of Inspection | |  | | FOD PSO Signature & Z # | |  | | | |
| **Component**  **Number** | MAWP | | Integrity | | | | Are Flex Hose Restraints used  **Yes or No** | **Flex Hose Restraint** | |
| ACCEPTABLE(good condition, no visible flaws) | | UNACCEPTABLE (Describe) (kinks, frayed, crushed, etc.) | | ACC | **UNACC** |
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**Tubing and Piping Data Sheet1**

| System ID No.: |  | Drawing # | |  | | | Date |  | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Components that tubing/Piping section is located between.**  **(eg. MV-4 & PI-3)** *This is N/A if all piping/tubing is the same size and type throughout entire system* | | | Tubing Material **(SS, CU, CS, etc.)** | | Tubing Spec./Grade **(316-A26, 304L-A358, etc.)** | **OD (in.)** | **ID (in.)** | **Seamless** | | **Max Operating Temp °F** |
|  |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |
|  | | |  | |  |  |  | **Yes** | **No** |  |

| **Pressure System Component List \*** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pressure system documentation package I.D. Number: | | | |  | | | | | |
| System Location (TA-BLDG-Room): | | | -      - | | | | | | |
| **Component I.D.** | Manufacturer | **Model Number** | | **Material (316S.S., Brass, etc.)** | **MAWP** | **Soft Goods Material(s)1** | **Code Stamp (U, UV,etc.)2** | **Listed Item (Y/N)** | **Code of Item** |
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| **Relief Device Placement Verification Record[[4]](#footnote-4)**  This form is to be maintained in the pressure system documentation package. | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1) Perform system review. Identify placement of all components in the pressure system in relationship to a pressure relief device. Can any components be isolated from a pressure relief device? (i.e., can a valve be closed which blocks flow path to a relief device?) | | | | | | | | | | |
| Yes  No | | | | | | | | | | |
| List below all the components that can be isolated from a pressure relief device. ( attach sheets as necessary) | | | | | | | | | | |
| a) |  | b) | |  | c) | |  | d) | |  |
| e) |  | f) | |  | g) | |  | h) | |  |
|  | | | | | | | | | | |
| 2) Is the MAWP, of any of the identified components, less than the system source supply pressure? | | | | | | | | | | |
| Yes  No | | | | | | | | | | |
| If yes, list components below, and re-design system to provide over pressure protection for the listed components. | | | | | | | | | | |
| **Component I.D.** | | | **Manufacturer** | | | **Model** | | | **MAWP (psig)** | |
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| **Thrust Consideration Data Sheet[[5]](#footnote-5)** | | | | | | |
| Use for all manual valves, nozzles, relief devices, solenoid valves, (etc.) in a system that discharge to the ambient surroundings. | | | | | | |
| **Component Identification String** | **Fluid** | **I.D. of nozzle/tubing at discharge (inches)** | **Maximum source pressure (psig)** | **Maximum surge or sustained thrust (lbf)** | **Type of restraint Mechanism  ( if any installed)** | **Maximum loading restraint can withstand [[6]](#footnote-6) (lbs)** |
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Sketch the pressure system

| **System I.D. Number** | **Relief Device Component I.D.** | **Sketcher/Evaluator Name** | **Date** |
| --- | --- | --- | --- |
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1. As such may be revised for format or to reduce required information with POC and Standards Manager approval as an admin change. [↑](#footnote-ref-1)
2. Examples of minor non-compliances are: Relief device past recall due date, in-service inspections past due date, chipped paint, lack of flex-hose restraints, leaking fittings, surface anomalies, identification tags, schematics do not match physical layout, mud dauber nests in relief valve discharge ports. [↑](#footnote-ref-2)
3. For ML-1 or ML-2 initiate an NCR [↑](#footnote-ref-3)
4. This data sheet accomplishes the requirements of ASME B31.3, Paras. 301.2.1 & 301.2.2 [↑](#footnote-ref-4)
5. This data sheet accomplishes the requirements of ASME B31.3, Paragraph 301.5.5, 322.6.2 & Appendix G [↑](#footnote-ref-5)
6. As determined by manufacturers’ documentation, finite element analysis, calculations, catalog description, etc. [↑](#footnote-ref-6)