

# **NASA Glenn Research Center Cyclotron Decommissioning Project**

**Creation, Revision, Approval, and Cancellation of  
GRC Cyclotron Decommissioning Project Plans,  
Procedures and Documents**

**AD-01 (CYC)**  
Revision 0

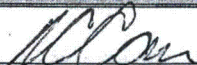


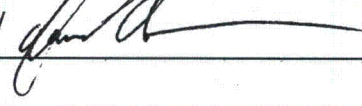
## GRC CYCLOTRON DECOMMISSIONING PROJECT ROUTING AND APPROVAL SHEET

**Document Title:** Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents

**Document Number:** AD-01 (CYC)

**Revision Number:** Rev 0

### ROUTING

	Signature	Date
Originator	R. Case / 	6/3/15
<b><u>Review and Concurrence:</u></b>		
Independent Technical Reviewer	C. Blasio / 	6-3-2015
NASA GRC Radiation Safety Officer	C. Blasio / 	6-3-2015
NASA Cyclotron Decommissioning Project Manager	D. Ebner / 	6/3/2015

**IMPLEMENTING APPROVAL:** \_\_\_\_\_

Signature

Date

**EFFECTIVE DATE:** \_\_\_\_\_

## NASA GRC CYCLOTRON DECOMMISSIONING PROJECT CHANGE/CANCELLATION RECORD

**DOCUMENT TITLE:** Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents.

**DOCUMENT NO:** AD-01 (CYC)

**REVISION NO:** Rev 0

**Revision 0:** Initial issue of Procedure. (June 2, 2015)

[illegible]



## LIST OF EFFECTIVE PAGES

DOCUMENT NO: AD-01 (CYC)

REVISION NO: 0

Page No.	Revision Level	Page No.	Revision Level	Page No.	Revision Level
Cover Page	0				
Routing Page	0				
Change Record	0				
LOEP	0				
Pages 1 thru 13	0				
App A, Pages 1 thru 1	0				
App B, Pages 1 thru 5	0				
App C, Pages 1 thru 7	0				
Exhibit 1, Pages 1 thru 2	0				
Exhibit 2, Pages 1 thru 2	0				
Exhibit 3, Pages 1 thru 2	0				
Exhibit 4, Pages 1 thru 2	0				
Exhibit 5, Pages 1 thru 2	0				
Exhibit 6, Pages 1 thru 3	0				
Exhibit 7, Pages 1 thru 2	0				
Exhibit 8, Page 1	0				



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## 1.0 INTRODUCTION

### 1.1 Purpose

Procedure AD-01 describes the process associated with the development, review, approval, implementation, and cancelation of Plans, Procedures, and Work Execution Packages (WEPs) for licensed decommissioning activities associated with the Glenn Research Center (GRC) Cyclotron Facility. Because of the level of technical and radiological safety review built into this process, documents generated using AD-01 criteria do not require specific approval by the Nuclear Regulatory Commission (NRC). Rather, this procedure itself will become a tie-down document in the GRC radioactive materials license along with the Decommissioning Plan. As such, AD-01 will govern how Cyclotron decontamination and decommissioning (D&D) Project Plans, Procedures, other than AD-01 itself, and Work Execution Packages will be approved. Any substantive changes to AD-01 will require NRC review and approval via a licensing amendment action.

### 1.2 Scope

This procedure shall be used for the development, review, approval, implementation, and cancelation of Plans, Procedures, and Work Execution Packages (WEPs) for licensed decommissioning activities associated with the Glenn Research Center (GRC) Cyclotron Facility. It applies to documents created or revised after the implementation date of this procedure.

The AD-01 process may also be used for Plans, Procedures, WEPs or other Cyclotron Decommissioning Project documents covering non-licensed activities. For such applications, the review/approval component of the AD-01 process will vary, as needed, to satisfy GRC requirements and ensure appropriate stakeholder involvement.

In support of other on-going activities at the Center, Health Physics Procedures (HPP) have been developed and implemented. Procedures similar to these existing HPPs will be needed to cover Cyclotron decommissioning activities. Rather than duplicate procedures, those identified as necessary for Cyclotron work will be updated, if needed, and then reviewed and approved per AD-01. The Title, Routing/Approval, Change/Cancellation, and List of Effective Pages prescribed by AD-01 will be placed at the front of these accepted HPPs.

**For Procedures only, the text “(CYC)” will be added to the document number to differentiate those procedures covering Cyclotron Decommissioning Project activities from others.**

## 2.0 REFERENCES

### 2.1 Applicable Documents

- 2.1.1 NASA Record Retention Schedule (NRSS) 1441.1 (as revised) as implemented in NASA Procedural Requirements (NPR) 1441.1E “NASA Records Management Program Requirements”.

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## 2.2 Records

- 2.2.1 Originals and all revisions of GRC Cyclotron Plans, Procedures, and Work Execution Packages.
- 2.2.2 Completed Work Execution Packages containing all data collected or recorded during performance of the specified work activity, and the daily work logs.
- 2.2.3 GRC Cyclotron Facility Document Control Log (Exhibit 8) containing procedure numbers, Work Execution Package numbers, revision numbers and Temporary Change Notice numbers assigned that allow administratively tracking documents through the preparation, review, and approval process.

## 2.3 Definitions

- 2.3.1 Affected Organization - Any organization, whose work is impacted by the document being issued, revised or cancelled.
- 2.3.2 Contingency Hard Copy – A reproducible paper copy of a final approved and issued document, with original signatures.
- 2.3.3 Controlled Copy – Copies of current approved documents that are authorized for use in the control of prescribed activities. The title page of each copy is stamped in red with the words CONTROLLED COPY with an identification number, or are duplicated on a read only type electronic storage media bearing a similar CONTROLLED COPY annotation. The identification number is associated with an individual who is assigned responsibility for maintaining that controlled copy issue of documents.
- 2.3.4 Document Change Package – An official record copy of a procedure or document that is maintained for the life of the Project. The Document Change Packages provide a single historical record of a document and its subsequent revisions.
- 2.3.5 Effective Date – The date, assigned by the Cyclotron Decommissioning Project Manager (or designee), on which compliance with a document becomes mandatory.
- 2.3.6 Field Copy – A field copy is a copy of a document made by duplication of the Contingency Hard Copy that can be used by personnel in the field for performance of the tasks controlled by the document. Field Copies bear a stamp or hand written statement in red on the cover page indicating “FIELD COPY” with a unique number assigned to each copy produced.

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- 2.3.7 Independent Technical Review/Reviewer – An Independent Technical Review is a review performed by a designated individual to verify the technical adequacy and correctness of a document. An Independent Technical Reviewer (ITR) is an individual who is knowledgeable of the area under consideration, and was not substantively involved in the preparation of the document under review. When the assigned ITR deems appropriate, he/she obtains a cross disciplinary review from other qualified individuals. If more than one individual is involved in the Independent Technical Review, the ITR is the individual whose signature attests that the Independent Review has been adequately performed.
- 2.3.8 Information Copy – An uncontrolled copy of a document that is used only as a source of general information. Information Copies may not be used for the control of prescribed activities since there is no assurance that they are the current effective revisions of the documents. Information Copies bear a stamp or hand written statement in red on the cover page indicating “INFORMATION COPY”.
- 2.3.9 Plans and Programs – Plans and Programs are higher tier documents that describe in more general terms the overall controls that are going to be used in the performance of the Project. They discuss general terms and conditions and describe the codes, standards, regulations, and overall project performance criteria that will be implemented through more detailed and specific lower tier procedures.
- 2.3.10 Procedures – Procedures are documents that provide step-by-step directions and instructions prescribing the performance of activities or the administration of project activities. They are prescriptive in nature and govern standard recurrent activities such as radiological surveys, operation of facility equipment, and performance of periodic surveillances. In addition, Work Execution Packages (WEP's) used as work control documents fall within the definition of procedures.
- 2.3.11 Work Execution Packages (WEP) – Work Execution Packages are work authorizing and control documents and task performance procedures that provide instructions and criteria for the performance of field activities associated with decommissioning tasks. In addition, they may be used as design change control documents to support engineering, construction, test, and installation activities to support system and structure design changes.

### 3.0 RESPONSIBILITIES

#### 3.1 Cyclotron Decommissioning Project Manager

The Cyclotron Decommissioning Project Manager (or designee) is responsible for the final approval and assignment of an effective date for all documents.



### 3.2 Originator

The originator is responsible for the technical accuracy of all information provided in the document, for obtaining the assistance and input from any organizations or individuals necessary to assure the technical accuracy, preparation of all forms and administrative records in conformance with the requirements of this procedure, and for assuring that all applicable document requirements and commitments are adequately and clearly incorporated into the document.

### 3.3 Reviewers

3.3.1 Reviewers are responsible for performing a thorough technical and administrative review of proposed documents, revisions, and cancellations to assure that they adequately address the subject matter, are technically accurate, and are in conformance with the requirements of this procedure and the references. Reviewers are responsible for assuring that a revision does not result in a deviation from regulatory requirements or commitments that were satisfied by the previous issue of the document. In addition, they are responsible for assuring that revisions to limited sections of a document do not result in conflicts with other sections that are not being revised.

3.3.2 An Independent Technical Reviewer (ITR) is responsible for verifying that the document is technically adequate and correct. In addition, Independent Technical Reviewers are responsible for maintaining their independence from the preparation of a document for which they serve as an ITR.

### 3.4 Project Radiation Safety Officer

The Project Radiation Safety Officer (RSO) is identified as a reviewer for all GRC Cyclotron Decommissioning Project documents and is responsible for ensuring radiological protection of workers, the public and the environment. In lieu of a Project Radiation Safety Officer, the NASA GRC Radiation Safety Officer may fulfil these responsibilities.

### 3.5 Supervisors and Task Managers

Supervisors and managers of tasks governed by procedures are responsible for assuring that only current approved revisions of documents are used for control of work activities, assuring that field activities are documented in accordance with this procedure and, that upon close out of Work Execution Packages, that required documentation is complete and accurately reflects the work performed.

### 3.6 Various Cyclotron Decommissioning Project Staff

Responsibilities associated with document control will be assigned as collateral duties to GRC Cyclotron Decommissioning Project staff. These persons will be

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responsible for document distribution, version control and associated record keeping. Alternately, the Project may utilize a dedicated document control administrator.

## **4.0 PROCEDURE**

### **4.1 General Requirements**

- 4.1.1 Instructions, procedures, and drawings shall be used to insure that activities of a type described in Appendix A, are performed in a manner that assures the protection of the workers, the public, and the environment from exposure to radiation and radioactive material, hazardous materials, and industrial health and safety hazards. They shall assure that the methods of controlling and performing work activities are consistent within all site working organizations and consistent with all applicable regulatory requirements. In addition, Work Execution Packages may be used to document and perform engineering design changes to the facility.
- 4.1.2 Instructions, procedures, plans, drawings, etc. will be complied with. When an unexpected situation occurs such that an instruction, procedure, plan, or drawing cannot be complied with as written, the work in progress shall be stopped, placed in a safe condition, and appropriate management informed of the situation. The activity will not be resumed until a revised instruction, procedure, plan, or drawing is approved and issued for implementation.
- 4.1.3 All individuals designated to sign a document as a reviewer or approver share in the originator's responsibility for the accuracy and adequacy of the final document. Accordingly, these individuals shall conduct their reviews in sufficient depth to assure that the final document meets the Project's high standards of quality.
- 4.1.4 When reviewing and concurring in a document revision that affects only limited portions of the document, sufficient review of the document in its entirety shall be performed to assure that the revisions do not have a negative impact or conflict with sections that are not revised. The reviewer/concurrence signature shall indicate concurrence in the document in its entirety.
- 4.1.5 Documents shall be typed in Microsoft™ WORD format so they are readily available electronically. Any readily available font may be used as suits the author's preference as long as the finished document presents a neat and professional appearance and is easy to read.
- 4.1.6 Documents shall be written and formatted in such a manner that they can be saved as a single Microsoft™ WORD file. An individual document shall not be stored in the form of multiple electronic files unless it is so large that it exceeds the storage capacity of the standard storage media available at the Project.

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4.1.7 If a procedure prescribes forms intended for general recurring use, the forms may be reproduced in Microsoft™ WORD or EXCEL format as a stand-alone file without the procedure headers and footers.

4.1.8 Forms that are shown in a procedure as an “Example” may be modified as long as the content given is retained as a minimum.

## **4.2 Creation, Revision, Review, and Approval of a Cyclotron Decommissioning Project Plan or Procedure**

4.2.1 When writing a new or revised plan or procedure, the originator shall determine the extent of any regulatory requirements or commitments that need to be imposed or revised in the written procedure and, as needed, will communicate with the organizations affected by the procedure to obtain any needed inputs for generating or revising the document.

4.2.2 Each new procedure shall have a unique number using the convention outlined in Appendix B. If revising an existing procedure, verify the correct revision number to use on the revised procedure. To differentiate those Procedures covering Cyclotron Decommissioning Project activities from other health physics procedures at GRC, the text “(CYC)” will be added to the end of the procedure number.

4.2.3 For those procedures serving as both GRC Health Physics Procedures and GRC Cyclotron Decommissioning Project Procedures, the content on the title page or other leading pages as well as page headers may vary somewhat from what is outlined in AD-01. For example, “Health Physics Procedure” may be stated instead of “Cyclotron Decommissioning Project.”

4.2.4 Prepare the written procedure or revision using the following format:

4.2.4.1 The first four pages of a procedure will consist of the Procedure/Plan Title Page shown in Exhibit 1, the Routing and Approval Sheet shown in Exhibit 2, the Change/Cancellation Record shown in Exhibit 3, and the List of Effective Pages shown in Exhibit 4. These pages will be un-numbered and the standard forms for these pages are completed as described in the Exhibits to this procedure.

4.2.4.2 Organize the body of the procedure using the format shown in Appendix B of this procedure.

4.2.5 Plans and other programmatic documents are generally broader in scope and less detailed and specific than implementing procedures. They provide overall descriptions of the programs and general commitments that will be implemented through specific procedures. In general, to initiate a new or revised Plan or other programmatic document, follow the same steps as used



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for procedures in steps 4.2.1 through 4.2.3 of this procedure with the following additional guidance:

- 4.2.5.1 A Table of Contents may be inserted after List of Effective Pages. Number the Table of Contents pages with sequential lower case Roman Numerals (i.e., i, ii, iii, iv, etc).
- 4.2.5.2 If practical, format the body of the document in a manner as close as possible to that specified for procedures. However, it is recognized that some Plans or Programmatic or Organizational documents may, by their very nature and content, not be conducive to that format. In such cases, organize the document in an outline or chapter format that is neat, logical, easy to read, and presents a professional appearance.
- 4.2.6 Project Procedures shall be concurred on and signed by at least the following personnel:
  - Originator
  - Independent Technical Reviewer (ITR)
  - Project Radiation Safety Officer (RSO)
  - NASA Cyclotron Decommissioning Project Manager (or designee)
  - (ONLY For documents submitted to the NRC) NASA GRC RSO
- 4.2.7 Signature requirements to be met for Procedures.
  - 4.2.7.1 The Originator and ITR shall both have the necessary knowledge and/or experience to develop and critically review documents being generated.
  - 4.2.7.2 The Project RSO may serve as the ITR or the Originator
- 4.2.8 Project Plan review, concurrence and approval.
  - 4.2.8.1 Original issue Project Plans and their revisions shall be reviewed and concurred in by the same individuals designated in step 4.2.6.
  - 4.2.8.2 Some Project Plans may require concurrence and approval from other (i.e. non-Project) entities in accordance with established GRC policy and/or procedures (e.g. Safety and Health Division approval of the Project Health and Safety Plan, or HaSP, or a Fall Prevention Plan). In such cases, the NASA Cyclotron Decommissioning Project Manager shall specify the list of concurrence signatures required for the subject document.

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4.2.8.3 Signature requirements for Project Plans shall, at a minimum, satisfy those described in step 4.2.7.

#### **4.3 Creation, Revision, Review and Approval of a GRC Cyclotron Decommissioning Project Work Execution Package**

4.3.1 An individual knowledgeable of the work to be performed shall prepare the Work Execution Package (WEP) or revision to an existing WEP.

4.3.2 Create a unique number for the WEP or a revision number for a revised WEP in accordance with Appendix C.

4.3.3 WEP originators shall familiarize themselves with the work area and the systems, components, and potential hazards that the area may contain. This familiarization shall also include a review, to the extent needed, of drawings, circuit diagrams and sketches that may provide information pertinent to preparing the WEP and in assessing the potential industrial and radiological safety hazards. It may be necessary to consult with field personnel, radiological controls staff, industrial safety and health staff and other site staff familiar with the area and familiar with the regulatory aspects that may need to be incorporated into the WEP.

4.3.4 Prepare the written WEP using the following format:

4.3.4.1 The first page will consist of the GRC Cyclotron Decommissioning Project Work Execution Package Cover Sheet shown in Exhibit 5. This page will be unnumbered, completed as described in the Exhibit, and listed in the List of Effective Pages (LOEP) as "Cover Page", and the listing shall show the current revision number.

4.3.4.2 The second and third pages will be the GRC Cyclotron Decommissioning Project Change/Cancellation Record shown in Exhibit 3, and the LOEP shown in Exhibit 4. These pages will be un-numbered and the standard forms for these pages are completed as described in the Exhibits to this procedure.

4.3.4.3 Organize the body of the WEP using the format and guidance shown in Appendix C of this procedure.

4.3.5 Upon completion of the review and comment on the draft, the originator shall prepare the final document for formal review.

4.3.6 Project WEPs shall be concurred on and signed by at least the following personnel:

- Originator

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- Independent Technical Reviewer (ITR)
- Project Radiation Safety Officer (RSO)
- NASA Cyclotron Decommissioning Project Manager (or designee)

#### 4.3.7 Signature requirements to be met for WEPs.

4.3.7.1 The Originator and ITR shall both have the necessary knowledge and/or experience to develop and critically review documents being generated. The independent technical review of the WEP is the responsibility of the organization preparing the subject document.

4.3.7.2 The Project RSO may serve as the ITR or Originator

4.3.7.3 Some Project WEPs may require concurrence and approval from other entities (i.e. non-Project) in accordance with established GRC policy and/or procedures. In such cases, the NASA Cyclotron Decommissioning Project Manager shall specify the list of concurrence signatures required for the subject document

#### 4.4 Final Document Concurrence and Distribution

4.4.1 When the Plan, Procedure, or WEP has been reviewed and approved, the NASA Cyclotron Decommissioning Project Manager (or designee) shall sign and date the document, and assign an effective date. This copy with the original signatures will become the 'contingency hard copy' and will be kept on file. A read-only electronic version of this signed document may be maintained in an electronic document management tool to facility file management.

4.4.2 Plans, Procedures, and WEPs shall be distributed as follows:

4.4.2.1 Printed controlled copies of Plans, Procedures, or WEPs may be produced from the 'contingency hard copy' or the read-only electronic version of that signed document. Similarly read-only type electronic storage media can be used to distribute controlled copies.

4.4.2.2 Each controlled copy shall be marked on the cover page or on the storage media in red block letters with the notation:

**CONTROLLED COPY**

**NO \_\_\_\_\_**



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- 4.4.2.3 Enter the designated copy number in the blank and distribute the controlled copies to the individuals designated as controlled copy holders.
- 4.4.2.4 The GRC Cyclotron Decommissioning Project Document Control Log (Exhibit 8) shall be updated with the new or revised document number, title, revision number and effective date.
- 4.4.2.5 Upon receipt of a change transmittal, controlled copyholders shall promptly update their document as specified dispose of the superseded version.
- 4.4.2.6 Field Copies of a WEP shall be produced from the contingency hard copy on white paper or read-only electronic storage media. Each Field Copy shall be marked on the cover page or on the storage media in red block letter the notation:

#### **FIELD COPY**

NO \_\_\_\_\_

- 4.4.3 A record shall be maintained of the Field Copies distributed to field supervisors for performance of prescribed activities. The records shall indicate the individual assigned custody of the Field Copy.
- 4.4.4 If processing a revision of a WEP, prior to issuing a Field Copy of the revised WEP, all issued field copies shall be returned and shall be closed out in accordance with step 4.5.6 of this procedure.

#### **4.5 Implementation and Closeout of a Work Execution Package**

- 4.5.1 Work specified in a WEP may begin on the effective date specified by the Cyclotron Decommissioning Project Manager (or designee).
- 4.5.2 Field supervisors who have custody of Field Copies shall verify each work day that the Field Copy in use is the currently approved revision.
- 4.5.3 On each day that activities prescribed by a WEP are performed, a GRC Cyclotron Decommissioning Project Work Execution Package Daily Activity Plan (Exhibit 6) will be completed by field supervisors and filed with the Addenda section of the Field Copy of the WEP. This form will document the daily activities performed under the WEP and will document the performance of a pre-work briefing.
- 4.5.4 Work shall be performed in compliance with the approved WEP using designated Field Copies for use in the field as needed.

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4.5.5 Field supervisors shall assure that all field generated documents, including the Daily Activities Plan are inserted in the Addenda section of the WEP Field Copy. The field generated documents shall be periodically removed from the Field Copy and transferred to the Contingency Hard Copy of the WEP.

4.5.6 Upon completion of the work prescribed by the WEP or upon issue of a revised WEP, the documentation shall be closed as follows:

4.5.6.1 The responsible field supervisor shall collect all field copies of the WEP.

4.5.6.2 The field supervisor shall incorporate all documents generated in the field copy into the Contingency Hard Copy, review the complete package, verify that all field generated documents contained in all Field Copies are transferred to the Contingency Hard Copy, and sign the Close-Out Approval section of the cover page on the original WEP. If the WEP is being superseded by a revision, the supervisor shall annotate the cover page stating that the WEP has been superseded by a new revision.

4.5.6.3 The package shall then be submitted to the Responsible Manager (or designee) who shall review and sign the Close-Out Approval section of the original WEP.

4.5.6.4 The WEP will then be submitted to GRC Document Control for retention. All other copies may then be destroyed.

#### **4.6 Cancellation of Procedures and Plans**

4.6.1 Cancellation of a procedure or plan is considered to be a revision and requires sufficient depth of review to confirm that the requirements and controls prescribed by the document are either no longer required, or have been adequately incorporated into a different document.

4.6.2 Preparation of a cancellation shall be as follows:

4.6.2.1 The originator prepares the first three pages (i.e.: Title Page, Routing and Approval Sheet, and Change/Cancellation Record) of a procedure or plan as described in step 4.2.3.1 of this procedure. In the Revision Number section of these pages, indicate "CANCELLATION".

4.6.2.2 On the GRC Cyclotron Decommissioning Project Change/Cancellation Record (Exhibit 3) enter "Procedure/Plan Cancelled" in the next line of the form with a description of the reason for cancellation.

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- 4.6.3 Route the cancellation for review and approval in the same manner as a revision.

#### 4.7 Temporary Change Notices

- 4.7.1 A Temporary Change Notice (TCN) may be initiated to obtain an expeditious short term revision to a Procedure or Work Execution Package when there is an immediate need for the revision in a short period of time, and the needed changes are limited in scope.
- 4.7.2 Temporary changes shall expire after either 90 calendar days (the effective date of the TCN being counted as day number 1 and the last day that it may be used as day number 90) or after being superseded by a formal revision.
- 4.7.3 Prepare the TCN using the Temporary Change Notice, shown in Exhibit 7 following the instructions provided in the Exhibit.
- 4.7.4 TCN shall be numbered "TCN XXXX-yyy", where XXXX is the calendar year and yyy is a sequential number for that year beginning with 001.
- 4.7.5 Record the TCN number and information as required on Exhibit 8.
- 4.7.6 Make a copy of the affected pages of the Procedure or Work Execution Package and make pen and ink changes as needed. If the changes result in the insertion of additional pages insert the additional pages using an alpha numeric numbering scheme. For example, if an additional page is needed after page 9, insert the page as page 9-A.
- 4.7.7 The TCN form shall be signed by the preparer and shall be concurred in by an Independent Technical Reviewer who is knowledgeable in the affected area. Additional reviews may be obtained if necessary.
- 4.7.8 The TCN shall then be approved by the Cyclotron Decommissioning Project Manager (or designee) or the GRC RSO, as appropriate.
- 4.7.9 After approval, the original TCN shall be filed as the Contingency Hard Copy with the document being changed. A copy shall be made of the approved TCN immediately for field use.
- 4.7.10 Distribution shall be to all holders of Controlled Copies or Field Copies of the Procedure or Work Execution Package being changed.
- 4.7.11 The GRC Cyclotron Decommissioning Project Document Control Log (Exhibit 8) shall be annotated to indicate that there has been a TCN issued against an existing Procedure or Work Execution Package.
- 4.7.12 When a TCN expires or has been replaced by a permanent revision, Controlled and Field Copy holders shall destroy their copies of the TCN,



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the GRC Cyclotron Decommissioning Project Document Control Log is updated, and the record copy with the superseded or cancelled historical procedure records sent to Document Control.

## **5.0 APPENDICES AND EXHIBITS**

- 5.1** Appendix A, "Guidance on Activities Requiring Written Procedures"
- 5.2** Appendix B, "Procedure Format and Content"
- 5.3** Appendix C, "Work Execution Package Format and Content"
- 5.4** Exhibit 1, "GRC Cyclotron Decommissioning Project Procedure/Plan Title Page"
- 5.5** Exhibit 2, "GRC Cyclotron Decommissioning Project Routing and Approval Sheet"
- 5.6** Exhibit 3, "GRC Cyclotron Decommissioning Project Change/Cancellation Record"
- 5.7** Exhibit 4, "List of Effective Pages"
- 5.8** Exhibit 5, "GRC Cyclotron Decommissioning Project Work Execution Package Cover Sheet"
- 5.9** Exhibit 6, "GRC Cyclotron Decommissioning Project Work Execution Package Daily Activity Plan"
- 5.10** Exhibit 7, "Temporary Change Notice (TCN)"
- 5.11** Exhibit 8, "GRC Cyclotron Decommissioning Project Document Control Log" (Example)

APPENDIX A  
Guidance on Activities Requiring Written Procedures

The following activities shall be performed in accordance with written instructions, procedures, or drawings:

1. Routine maintenance on major components or systems that could have an effect on radiation safety.

2. Personnel radiation protection consistent with applicable regulations.

This includes performance and documentation of surveys, sampling, and personnel monitoring. It includes implementation of an ALARA program, development of RWP's, dosimetry control, dose assessment, and control of postings.

3. Administrative controls for maintenance and for the conduct of activities that could affect facility radiation safety.

This includes all administrative controls related to the performance of decommissioning activities, and the generation and retention of records required by regulations applicable to the project or to the NRC License.

4. Shipping and receipt of radioactive material.

This includes any special procedures for Cyclotron Decommissioning Project activities which fall outside the scope of existing Center processes for RAM shipment or receipt.

5. Waste Management

This includes the collection, isolation, sampling, analysis, characterization, storage, handling, packaging, and preparation for shipment, transfer, or disposal of material containing radioactive material. In addition, it includes the specification of containers, purchase, receipt, inspection, and control of containers that will be used for the control of radioactive material.

6. Environmental Protection Management

This includes procedures for the implementation of the Environmental Management Plan, Storm Water Pollution Prevention Plan, Environmental Media Sampling and Analysis Plan, and for the control, handling, and processing of Hazardous Waste or Mixed Waste, as applicable. Alternatively, other Center processes/protocols may be utilized/implanted to satisfy these requirements.

7. Design, performance, review, and quality control of radiological survey and sampling performed in support of Characterization and Final Status Survey.

APPENDIX B  
Procedure Format and Content

The pages used for the body, appendices, and attachments of the procedures shall have a header similar to the following:

NASA GRC Cyclotron Decommissioning Project	<b>Title:</b> -1-	
	<b>Document Number:</b> -2a- -2b-	<b>Revision Number:</b> -3-

**-1- :** Enter a title for the procedure. The title should be brief but should effectively reflect the procedure's objectives.

**-2a-:** Enter a unique number for the procedure. For example, procedures that are within the Administrative system are numbered AD-01, 02, 03, etc. Use the following convention, or similar, for numbering procedures:

- AD: Administrative Systems
- CP: Radiological Characterization and Final Status Survey
- EM: Environmental Management Processes
- HS: Industrial Health and Safety/Industrial Hygiene
- RP: Radiation Protection Activities
- QA: Quality Assurance Programs and QA Related Activities
- WM: Waste Management Operations

**-2b-:** Enter the text "(CYC)" to designate that the procedure is associated with the Cyclotron Decommissioning Project.

**-3-:** Enter a revision number. When a new procedure is issued, all pages will be indicated as "Revision 0". When updated, the revision number will apply to the document in its entirety.

Enter the required procedure/plan information on the GRC Cyclotron Decommissioning Project Document Control Log (Exhibit 8).

All pages of the body will have a footer that provides a sequential number for all pages, beginning with page 1 for the first page of the body.

Organize the body of the procedure in a numbered outline format with the following sections as a minimum:

APPENDIX B  
Procedure Format and Content

**1.0    INTRODUCTION**

- 1.1    Purpose** – provide a procedure description and the objectives that are expected to be accomplished.
- 1.2    Scope** – provide statements that describe the conditions under which the requirements and provisions of the procedure apply and the extent to which they apply.

**2.0    REFERENCES**

- 2.1    Applicable Documents** – In sub-elements to this heading, list reference documents to which reference is actually made in the document. Note that this section is not intended to be a bibliography of all documents that were researched in the preparation of the procedure. It should only list those documents that are actually referred to in the text of the procedure.
- 2.2    Records** – In sub-elements to this heading, list the project records that this procedure creates or affects, and a brief description of the disposition of those records. If there are no records established or affected by the procedure, this section may be omitted and the following sections renumbered accordingly.
- 2.3    Definitions** – In sub-elements to this heading, define significant words or phrases that appear in the procedure for which the originator desires to apply a specific definition. Commonly used terms and phrases that are already clearly defined in Regulations, or other higher tier documents such as the Decommissioning Plan, do not need to be re-listed in this section unless this procedure intends to apply a more specific definition than those previously given.

**3.0    RESPONSIBILITIES**

In this section provide a sub-element for each organization and/or position with specific responsibilities related to completion of actions contained in or specified by the procedure.

**4.0    PROCEDURE**

- 4.1** Section four is the beginning of the body of the procedure. This section and subsequent sequentially numbered sections shall be given appropriate header titles and provide the step by step elements needed to clearly specify the directions to successfully accomplish the objectives of the procedure. The first main element (section 4.1) will generally be a list of general requirements, or precautions and limitations, or prerequisites as appropriate. It may also be the first logical section of a procedure containing several subsequently numbered sections.



APPENDIX B  
Procedure Format and Content

- 4.2 Use an outline number format for section numbering, for example:

4.0 PROCEDURE

X.1 Sub Element

X.1.1 Sub-sub element

X.1.1.1 Further sub-elements

- 4.3 If appropriate to the subject matter, the body of the procedure may include a BACKGROUND section in which the overall process, the reasons for the process being developed, or a summary of the technical or regulatory issues related to the process may be discussed.
- 4.4 Procedural steps or elements should provide sufficient guidance such that personnel can effectively and efficiently follow the procedure. A procedure should contain sufficient detail for an individual to perform the required functions without direct supervision, but need not provide a complete description of the process or system. The level of detail should be commensurate with the training and qualifications of the individuals who will normally perform the function.
- 4.5 Avoid procedural steps and sequences that unnecessarily constrain or complicate conduct of the procedure. Provide flexibility to the extent practical while maintaining the intent and integrity of the procedural controls.
- 4.6 Use "NOTES" within a procedure when it is desired to reinforce the user's understanding of a particular statement or to provide explanation of the step. Do not include executable steps or actions within a "NOTE".
- 4.7 Use "CAUTION" notes immediately prior to steps where the user should be alerted to a specific potential hazard or where the user should be alerted to the need to take a precautionary measure before, during, or immediately following the performance of the steps. Do not include executable steps or actions within a "CAUTION".
- 4.8 Ensure that procedural elements do not conflict with other existing procedures, plans, or programs.
- 4.9 As a general rule, avoid long sentences, complex or confusing punctuation, slang, jargon, and incorporation of multiple steps or actions into a single procedure step.
- 4.10 In general, incorporate the requirements of other procedures, plans, and programs by reference rather than by direct insertion into the text. This will minimize the need to revise the procedure if the reference is changed.

APPENDIX B  
Procedure Format and Content

**5.0 APPENDICES AND EXHIBITS**

- 5.1** The last section of the body of the procedure will be titled "Appendices, Attachments, Exhibits, etc." as appropriate and will follow with subsequent subparagraphs that list the titles of the appropriate Appendices, Attachments, Exhibits, etc., as appropriate. For example:

**5.0 APPENDICES AND EXHIBITS**

X.1 Appendix A, "Title"

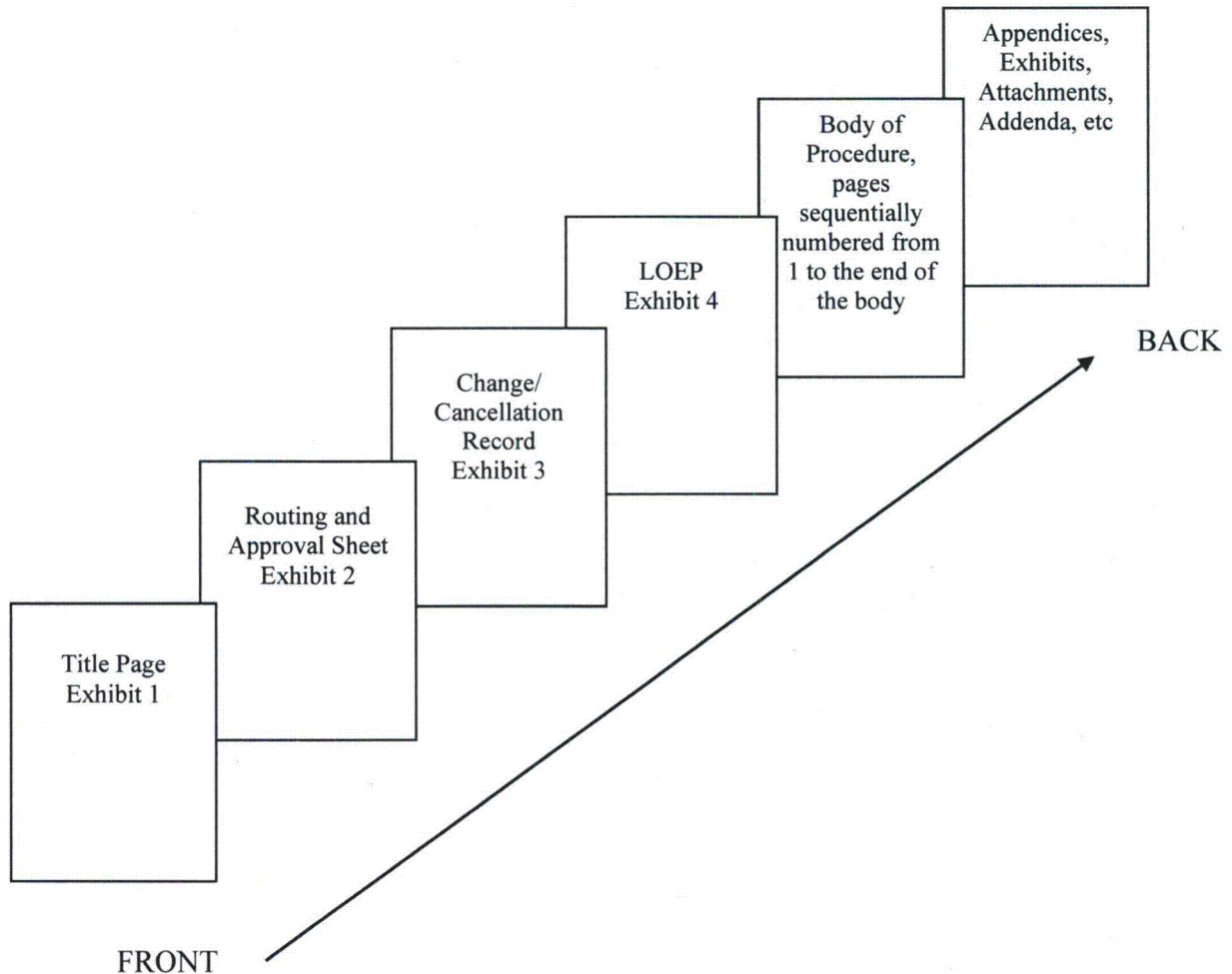
X.2 Exhibit 1, "Title"

Attachments, Appendices, Forms, Addenda, Exhibits, etc., shall have a header that in addition to the information contained in the body header will have a centered title indicating the Appendix, Attachment, Exhibit etc., number and the title of the Appendix, Attachment, etc. The bottom of the page will contain a footer with the page number formatted as "Appendix (or Attachment, etc.) #, page x of x", with the first page numbered as page 1 and subsequent pages sequentially numbered.



APPENDIX B  
Procedure Format and Content

The final completed procedure will be compiled as shown:



## APPENDIX C

### Work Execution Package Format and Content

- 1.0** The pages used for the body of the Work Execution Packages shall have a header similar to the following:

<b>GRC Cyclotron Decommissioning Project Work Execution Package</b>	
Work Execution Package Number: WEP-_____ - _____ - 1 -	Revision No. _____ - 2 -

- 1- :** Enter the Work Execution Package Number. Work Execution Packages are numbered using the convention WEP-yy-xxx, where "yy" is the last two digits of the calendar year in which the Work Execution Package is initiated, and xxx is a sequential number.
- 2- :** Enter the revision number of the Work Execution Package. The original issue of a new WEP is Rev 0. Subsequent revisions are sequentially numbered.

Enter the required WEP information on the GRC Cyclotron Decommissioning Project Document Control Log (Exhibit 8).

- 2.0** Organize the body of the Work Execution Package in a numbered outline format with the following sections as a minimum:

#### *1.0 TASK DESCRIPTION*

Provide a brief description of the tasks to be performed, the task objectives, and the intended end point or task outcome. Use additional outline formatted subparagraphs as needed.

#### *2.0 SPECIAL REQUIREMENTS*

This section will describe the requirements specific to the Work Execution Package that must be imposed to assure the safe performance of the planned activity. This section will be broken down into the following sub-elements:

##### *2.1 Special Equipment, Materials, and Training*

In this section, provide a listing or description of special tools, equipment, materials, and training that will be needed to perform the planned tasks. This section does not need to be a detailed list of every possible item needed for the task, rather it should be written with the assumption that normal common hand tools and accessories are available and that all individuals assigned to perform the tasks have



## APPENDIX C

### Work Execution Package Format and Content

received relevant training. It should describe the need for special tools or material handling equipment and specialized training such as "Qualified Crane Operator", "HAZWOPER", asbestos worker training, lead worker training, etc., that will be required to perform the task and exceed the normally expected training and qualification levels of the field workers. Use additional outline formatted subparagraphs as needed.

#### *2.2 Permits and Special Controls Required*

In this section, list all of the permits that will be required to perform the planned activity. These would include Radiation Work Permit, Hot Work Permit, Confined Space Permit, Excavation Permit, or any other facility permits that may be needed. The need for permits is determined by the evaluation of the proposed work activity performed in the job specific Job Hazard Analysis (JHA) which will be included in the Work Execution Package as Appendix A. Any special controls required will be determined by the JHA. Use additional outline formatted subparagraphs as needed.

**NOTE:** This section does not need to identify the permits by specific permit number, as the permits may be prepared after approval of the WEP. It is intended as a place to identify the fact that a specific type of permit will be required to perform the planned work activities.

#### *3.0 REFERENCES*

##### *3.1 Reference Documents*

In sub-elements to this heading, list documents to which reference is actually made in the WEP. Note that this section is not intended to be a bibliography of all documents that were researched in the preparation of the procedure. It should only list those documents that are actually referred to in the text of the WEP. If there are no references, state "NONE" in this section.

##### *3.2 Definitions*

In sub-elements to this heading, define significant words or phrases that appear in the procedure for which the originator desires to apply a specific definition. Commonly used terms and phrases that are already clearly defined in Regulations, or other higher tier documents such as the Decommissioning Plan, do not need to be re-listed in this section unless this procedure intends to apply a more specific definition than those previously given. If there are no terms that require specific definitions, state "NONE" in this section.

#### *4.0 PREREQUISITES, PRECAUTIONS, AND LIMITATIONS*

## APPENDIX C

### Work Execution Package Format and Content

Prerequisites are any actions that must be completed and verified completed before the Work Execution Package can be used. These are generally actions that are performed by some other instruction or procedure, or are pre-existing conditions that must exist. If an initial set of conditions must be established by this procedure, they should in general be established by initial procedural steps rather than be listed as prerequisites. In this section provide a sub-element for each prerequisite that must be satisfied.

Precautions and Limitations are important measures which are used to protect personnel or equipment, to avoid an abnormal or emergency situation, or to place specific limitations on the processes used or scope of work being performed. In addition to being listed here, they should also appear in a blocked-in cautionary note immediately prior to the specific step where needed to alert the user of a potential hazard.

- 3.0** Organize the work performance steps beginning with an appropriately titled section 5.0 and continue with as many outline formatted subparagraphs as needed to clearly and logically prescribe the steps need to perform the work as shown in the example below:

5.0 *First main element*

5.1 *Sub-element*

5.1.1 *Sub-sub-element*

6.0 *Second main element*

6.1 *Sub-element*

6.1.1 *Sub-sub-element*

Continue with outline numbered sections as needed to provide the step by step elements needed to clearly specify the directions to successfully accomplish the objectives of the procedure. The following is general guidance on the content and nature of the steps to be included in a WEP:

- Elements of the Work Execution Package should provide sufficient guidance such that personnel can effectively and efficiently follow and implement the steps. A Work Execution Package should contain sufficient detail for an individual to perform the required functions without direct supervision, but need not provide a complete description of the process or system. The level of detail should be commensurate with the training and qualifications of the individuals who will normally perform the function.



### APPENDIX C

#### Work Execution Package Format and Content

- Avoid Work Execution Package steps and sequences that unnecessarily constrain or complicate conduct of the procedure. Provide flexibility to the extent practical while maintaining the intent and integrity of the procedural controls.
- The Work Execution Package steps shall be written with the assumption that they will be performed in the sequence in which they appear. If work is not 'sequence sensitive', the Work Execution Package shall clearly state which steps do not need to be performed in the order in which they appear.
- Use "NOTES" within a Work Execution Package when it is desired to reinforce the user's understanding of a particular statement or to provide explanation of the step. Do not include executable steps or actions within a "NOTE".
- Use "CAUTION" notes immediately prior to steps where there is a need to alert the user to a specific potential hazard or to the need to take a precautionary measure before, during, or immediately following the performance of the steps. Do not include executable steps or actions within a "CAUTION".
- Ensure that procedural elements do not conflict with other existing procedures, plans, or programs.
- As a general rule, avoid long sentences, complex or confusing punctuation, slang, jargon, and incorporation of multiple steps or actions into a single procedure step.
- In general, incorporate the requirements of other project approved procedures, plans, and programs by reference rather than by direct insertion into the text. This will minimize the need to revise the procedure if the reference is changed.
- When executable steps in a Work Execution Package are to be performed in accordance with manufacturer's published technical manuals, it is acceptable to either incorporate the manual procedures by reference or include the applicable portion of the manual in the Work Execution Package as an Attachment.
- If executable steps in a Work Execution Package are to be performed in accordance with contractor or vendor prepared procedures that are not part of a published technical manual, it is acceptable and encouraged to include the document or sections of the document in the Work Execution Package as an Attachment, rather than rewrite the document into the body of the Work Execution Package.
- If steps of a Work Execution Package require lifting and handling operations where specific use of lift plans, rigging sketches, etc. are needed, they may be

## APPENDIX C

### Work Execution Package Format and Content

included in the WEP as Attachments and review and approval obtained as part of the WEP review and approval process. However, there may also be situations where the detailed lifting plans and sketches cannot be prepared during the WEP development process due to the need to obtain field data and information prior to their preparation. In these situations, and situations where lift documentation was not prepared as an Attachment during WEP preparation, the steps of the WEP should be worded in such a manner that these plans and sketches are prepared, reviewed, and approved in accordance with applicable lifting and handling procedure requirements prior to performing the lifting steps. The lifting documents shall then be inserted in the WEP Addenda as Field Generated documents.

- 4.0** The last section of the body of the Work Execution Package will be a listing of the Appendices, Attachments, and Addenda, as appropriate, per the following example:

*X.0 APPENDICES, ATTACHMENTS, AND ADDENDA*

*X.1 Appendix X, "Title"*

*X.2 Attachment X, "Title"*

*X.3 Addendum X, "Title"*

- 5.0** Following the body of the WEP will be the Appendices. Appendix A of the Work Execution Package will be a job-specific Job Hazard Analysis (JHA). Any specific precautions and limitations identified by the JHA shall be incorporated as Work Execution Package line items in the appropriate section of the body of the Work Execution Package. The pages of the JHA will be marked at the top of each page with a header similar to the following:

#### **Appendix A, Job Hazard Analysis**

**Work Execution Package WEP-\_\_\_\_\_ - \_\_\_\_\_**

The bottom of each page shall be numbered page x of y, where 'x' is a sequential number beginning with 1, and 'y' is the total number of pages to the JHA. Appendix A pages shall be listed in the WEP LOEP as Appendix A, page x, etc.

- 5.1** Additional Appendices may be added as needed. In general, Appendices should be used to incorporate items such as safety analysis, structural evaluations, calculations, or other types of technical or regulatory required analysis that may be needed to support the work activities described in the WEP. Using Appendices in this manner enables the WEP to be used as both an installation procedure and an engineering design package if needed.



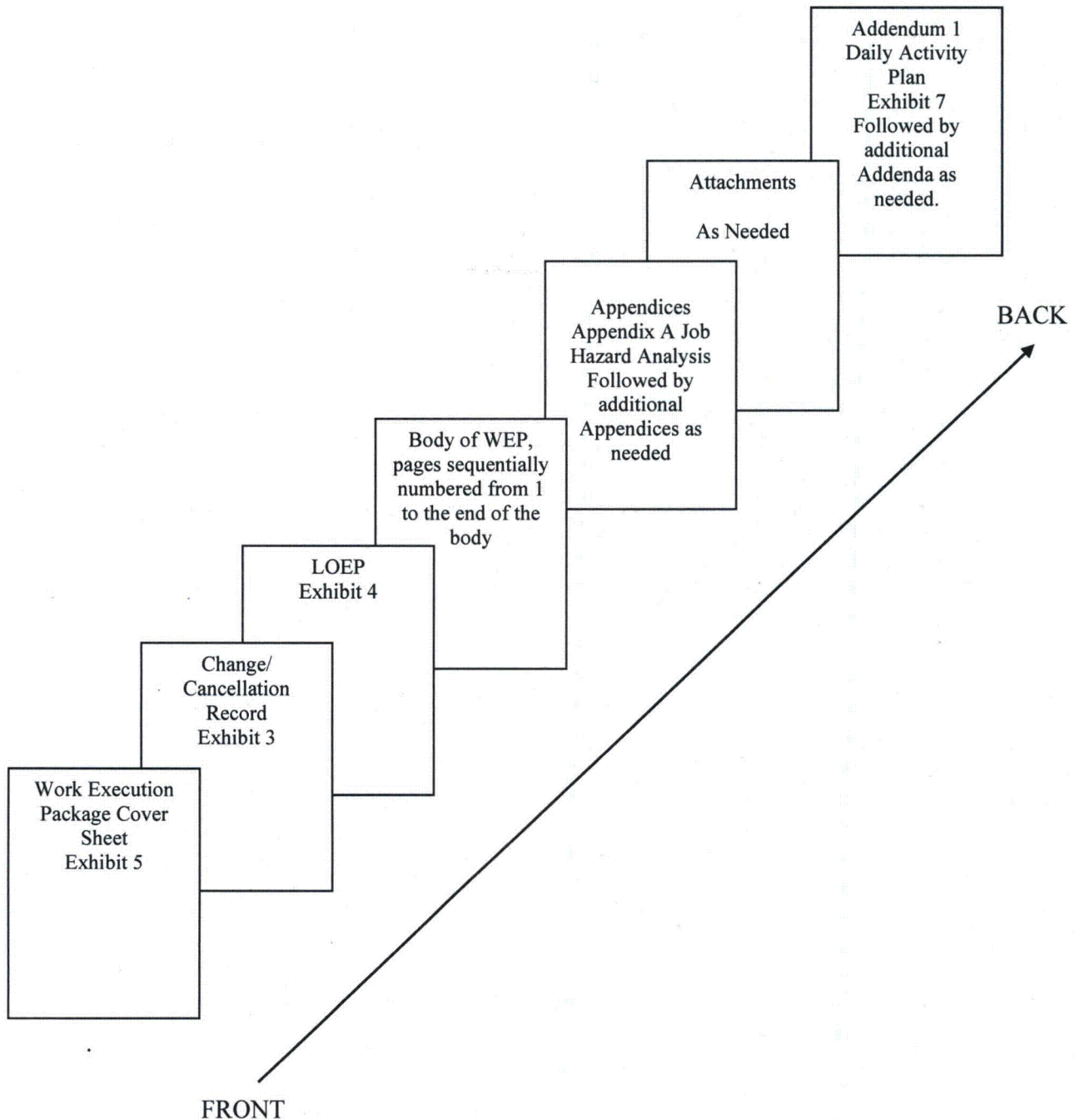
### APPENDIX C

#### Work Execution Package Format and Content

- 6.0** Attachments will be added to incorporate drawings, sketches, layout diagrams, surveys, or vendor or contractor procedures needed to support the planned work. A cover sheet will be included at the beginning of each Attachment giving the Work Execution Package number, the Attachment number, and a title for the Attachment. This cover sheet will be unnumbered and shown in the LOEP as "Attachment x, Cover Page". Pages after the Attachment cover page will be numbered or identified in any convenient format that allows listing of each uniquely identified page in the LOEP and is conducive to performing page checks of the Work Execution Package to verify its completeness.
- 7.0** Addenda will be used to insert field generated documents into the Field Copy of the WEP. In general, Addenda will be used where it is necessary to record data or information collected in the field during performance of the planned work. The first Addendum will be as follows:
- Addendum 1 of the WEP will be a Work Execution Package Daily Activities Plan. The Work Execution Package will have a single copy of the Daily Activities Plan with only the identifying information filled in included during the review and approval of the WEP. It will be shown on the WEP LOEP as Addendum 1. Subsequent pages and insertions will not be listed in the LOEP. The Daily Activity Plan, as shown in Exhibit 6, will be filled in by the appropriate job supervisor each day that work is performed under the control of the WEP. The Daily Activity Plan provides a check list to assure that appropriate permits are in effect each day prior to start of work, provides an input for the daily pre-job briefing of the work crews, and a means for verifying that the JHA and all necessary procedures are up to date. In addition, it provides a daily journal of the work accomplished and a record of pre-job briefing attendance. Each day that work is performed under the WEP, an additional Daily Activities Plan will be completed and inserted into the Field Copy of the WEP behind the Addendum 1 Cover sheet.
  - If additional Addenda are needed to record field data or to insert lift plans or rigging sketches, they shall be numbered sequentially and listed in the LOEP as Addendum 'x', where 'x' is a sequential number.
- 8.0** The final completed Work Execution Package will be compiled as shown on the following page:

APPENDIX C  
Work Execution Package Format and Content

The final completed WEP will be compiled as shown:



NASA GRC  
Cyclotron Decommissioning Project

**Title:** Creation, Revision, Approval and Cancellation of GRC Cyclotron  
Decommissioning Project Plans, Procedures and Documents

**Document Number:** AD-01 (CYC)

**Revision Number:** 0

Exhibit 1

GRC Cyclotron Decommissioning Project - Procedure/Plan Title Page

# NASA Glenn Research Center Cyclotron Decommissioning Project

- 1 -

- 2 -

- 3 -

- 4 -



Exhibit 1

GRC Cyclotron Decommissioning Project - Procedure/Plan Title Page

- 1 -: Enter the title of the document. A Times New Roman 20 pt bold font is recommended.
- 2 -: Enter the procedure/document number. A Times New Roman 16 pt font is recommended.
- 3 -: Enter the revision number of the document. A Times New Roman 16 pt font is recommended.
- 4 -: (Optional) Revision date. A Times New Roman 16 pt font is recommended.

NASA GRC Cyclotron Decommissioning Project	Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents	
	Document Number: AD-01 (CYC)	Revision Number: 0

Exhibit 2

NASA GRC Cyclotron Decommissioning Project - Routing and Approval Sheet

<b><u>NASA GRC CYCLOTRON DECOMMISSIONING PROJECT</u></b> <b><u>ROUTING AND APPROVAL SHEET</u></b>
--

Document Title:      - 1 -

Document Number:      - 2 -

Revision Number: - 3 -

**ROUTING**

	Signature	Date
Originator	- 4 -	
<b><u>Review and Concurrence:</u></b>		
Independent Technical Reviewer	- 5 -	
Project Radiation Safety Officer	- 6 -	
NASA Cyclotron Decommissioning Project Manager	- 7 -	
	- 5 -	
	- 5 -	

IMPLEMENTING APPROVAL:      - 7 -

\_\_\_\_\_
\_\_\_\_\_

Signature
Date

EFFECTIVE DATE:      - 8 -

\_\_\_\_\_

NASA GRC Cyclotron Decommissioning Project	Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents	
	Document Number: AD-01 (Cyc)	Revision Number: 0

Exhibit 2

NASA GRC Cyclotron Decommissioning Project - Routing and Approval Sheet

- 1 -: Enter the title of the document.
- 2 -: Enter the document number.
- 3 -: Enter the revision number of the document. For a new document this will be revision 0.
- 4 -: The procedure originator signs and dates in this block when all comments from the review process have been resolved, and the document is submitted for final approval.
- 5 -: The ITR will sign and date the appropriate block when they are ready to concur with the final document. Similarly, other reviews identified on the Routing and Approval Sheet will also sign and date as needed.
- 6 -: The Project Radiation Safety Officer signs and dates signifying approval of the final document.
- 7 -: The NASA Cyclotron Decommissioning Project Manager (or designee) signs and dates signifying that all reviews are complete and the document is ready for distribution and implementation on the date specified in the following.
- 8 -: The NASA Cyclotron Decommissioning Project Manager (or designee) enters the effective date by which the document is to be implemented. On the specified date, compliance with the document is mandatory and all prior revisions, if any, are cancelled.





NASA GRC Cyclotron Decommissioning Project	Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents	
	Document Number: AD-01 (CYC)	Revision Number: 0

Exhibit 3

NASA GRC Cyclotron Decommissioning Project - Change/Cancellation Record

- 1 -: Enter the title of the document.
- 2 -: Enter the document number.
- 3 -: Enter the document revision number. For a new document this will be revision 0.
- 4 -: In the first line of the form, enter "Revision 0: Initial Issue of Document"
- 5 -: In subsequent lines of the table enter the subsequent revisions. This will be a historical list of all revisions to the procedure. Accordingly, as subsequent revisions are issued, the record of prior revisions is not deleted; rather, additional table lines are added as needed to keep a list of all prior revisions. After entering the latest revision number, give a brief description of the revision. If a revision reissues the entire document, state that the revision revised the document in its entirety and describe the basic reasons for the revision. If only selected pages of the document are revised, list the page numbers that were changed.



Exhibit 4

List of Effective Pages (LOEP)

**LIST OF EFFECTIVE PAGES**

DOCUMENT NO.: - 1 - REVISION NO.: - 2 -

Page No.	Revision Level	Page No.	Revision Level	Page No.	Revision Level
- 3 -	- 5 -				
- 4 -					

NASA GRC Cyclotron Decommissioning Project	Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron Decommissioning Project Plans, Procedures and Documents	
	Document Number: AD-01 (CYC)	Revision Number: 0

#### Exhibit 4

#### List of Effective Pages (LOEP)

- 1 -: Enter the Procedure, Work Execution Package, or document number or the title if the document is not numbered.
- 2 -: Enter the current revision number of the document.
- 3 -: The first four entries will always be the Cover Page, Routing Page, Change Record, and LOEP.
- 4 -: Enter the number of the remaining pages of the document. The pages in the body of the document are sequentially numbered as 1 through the end. Appendices, Attachments, Addenda, Exhibits, etc. will be listed with an indication of the Appendix etc. number and the page number within the Appendix. For Example:

Pages 1 thru nn  
APP A, Pg 1  
APP A, Pg 2  
EXH 1, Pg 1  
ATT 1, Pg 1  
Etc.

It is important to be sure that every effective page of the document is included in the LOEP, since it serves as a tool to page check a document in use to assure that the document in use is complete and current.

- 5 -: List the current revision number for the page in the preceding column.

## NASA GRC Cyclotron Decommissioning Project Work Execution Package

Work Execution Package Title

- 1 -

WEP Number - 2 -

WEP- \_\_\_\_\_ - \_\_\_\_\_

Revision #

- 3 -

Effective Date

- 4 -

### DOCUMENT CONTROL STAMP

- 5 -

Title	Signature	Date
Originator	- 6 -	
Independent Technical Reviewer		
Supervisory Review		
Project Radiation Safety Officer		
<b>IMPLEMENTATION APPROVAL</b>		
NASA Cyclotron Decommissioning Project Manager	- 7 -	
<b>CLOSE OUT APPROVAL</b>		
Responsible Manager	- 8 -	

- 1 - :

Enter a concise but descriptive title for the Work Execution Package.



- 2 - : Enter the WEP number using the guidance provided in Appendix C.
- 3 - : Enter the revision number of the Work Execution Package. An initial issue of a Work Execution Package will be Rev. 0, with subsequent revisions sequentially numbered.
- 4 - : The effective date is entered by the Implementing Approval after signing the approval block.
- 5 - : This space is for imprinting the document control stamp for Field Copies.
- 6 - : Enter a concise but descriptive title for the Work Execution Package.
- 7 - : Implementation Approval
- 8 - : Close Out Approval

NASA GRC  
Cyclotron Decommissioning Project

Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron  
Decommissioning Project Plans, Procedures and Documents

Document Number: AD-01 (CYC)

Revision Number: 0

Exhibit 6

NASA GRC Cyclotron Decommissioning Project - Work Execution Package Daily Activity Plan

**ADDENDUM 1**  
**DAILY ACTIVITY PLAN**

Date:		<u>Reference Permits</u>	
WEP and Rev. #		RWP #	
WEP Name		Confined Space Permit #	
Building #		Hot Work Permit #	
Area/Location		Critical Lift Plan #	
Field Supervisor		Excavations (Dig) #	
		Other	

Safety Topic:

Planned Activities:

Safety Notes/Instructions:

**Daily Check List**

<u>Reviewed</u>	<u>Yes</u>	<u>N/A</u>	<u>Initials</u>	<u>Daily Hazards (Check all that apply.)</u>		
Job Hazard Analysis				<input type="checkbox"/> Vision	<input type="checkbox"/> Hazardous Energy	<input type="checkbox"/> Fire
Work Instructions				<input type="checkbox"/> Noise	<input type="checkbox"/> Hand	<input type="checkbox"/> Access
Referenced Permits				<input type="checkbox"/> Head	<input type="checkbox"/> Slip, Trip, Fall	<input type="checkbox"/> Electrical
RWP and Postings				<input type="checkbox"/> Foot	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Communication
Implementing Procedures				<input type="checkbox"/> Face	<input type="checkbox"/> Thermal	<input type="checkbox"/> Ergonomic
Other (specify)				<input type="checkbox"/> Respiratory	<input type="checkbox"/> Confined Space	<input type="checkbox"/> Interface
				<input type="checkbox"/> Lead	<input type="checkbox"/> Rescue	<input type="checkbox"/> Radiological
				<input type="checkbox"/> Asbestos	<input type="checkbox"/> Chemical Exposure	<input type="checkbox"/> Other

Review the current radiological surveys associated with the RWP's for this job and assure that the radiological conditions are discussed in the pre-job brief. ☐

NASA GRC  
Cyclotron Decommissioning Project

Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron  
Decommissioning Project Plans, Procedures and Documents

Document Number: AD-01 (CYC)

Revision Number: 0

Exhibit 6

NASA GRC Cyclotron Decommissioning Project - Work Execution Package Daily Activity Plan

**DAILY ACTIVITY REPORT**

WEP #

Date

WEP Name:

Work Completed This Shift:





NASA GRC  
Cyclotron Decommissioning Project

Title: Creation, Revision, Approval and Cancellation of GRC Cyclotron  
Decommissioning Project Plans, Procedures and Documents

Document Number: AD-01 (CYC)

Revision Number: 0

Exhibit 7

Temporary Change Notice (TCN)

GRC CYCLOTRON DECOMMISSIONING PROJECT TEMPORARY CHANGE NOTICE		
Procedure/ Work Instruction No. and Rev. No. - 1 -		TCN Number - 2 -
Effective Date: - 3 -		Expiration Date: - 4 -
Reason for the Temporary Change:  - 5 -		
Description of Change:  - 6 -		
APPROVAL		
	SIGNATURE	DATE
Originator		
ITR		
NASA Cyclotron Decommissioning Project Manager or Project RSO		
CANCELLATION		
Reason for Cancellation: - 7 -		
Expired <input type="checkbox"/> Incorporated into a Revision <input type="checkbox"/> Need No Longer Exists <input type="checkbox"/>		
Cancelled By: - 8 -	ITR: - 9 -	



Exhibit 7  
Temporary Change Notice (TCN)

- 1 -: The originator enters the number and current revision number of the Procedure or WEP that is being modified by the TCN.
- 2 -: Enter the number of the TCN.
- 3 -: Enter the date that the originator requests that the TCN become effective.
- 4 -: Enter the expiration date. This is the last day on which the TCN may be used and is the 90<sup>th</sup> day, counting the effective date as day one. The TCN will expire at the end of work on this date.
- 5 -: Describe the reason that the temporary change is needed.
- 6 -: Describe the change. Give details on what aspect of the Procedure or WEP is being changed, and list the specific pages and paragraph numbers on which changes are made.
- 7 -: When the TCN is cancelled, check the reason for the cancellation.
- 8 -: The individual completing the cancellation signs after verifying all Controlled and Field Copies have been destroyed, and the GRC Cyclotron Facility Document Control Log is updated.
- 9 -: Enter the signature of an ITR who concurs that the cancellation is acceptable, or enter 'N/A' if the cancellation is due to reaching the expiration date.

NOTE: An ITR review is not required if the TCN has reached its expiration date.

NASA GRC  
Cyclotron Decommissioning Project

**Title:** Creation, Revision, Approval and Cancellation of GRC Cyclotron  
Decommissioning Project Plans, Procedures and Documents

**Document Number:** AD-01 (CYC)

**Revision Number:** 0

Exhibit 8

NASA GRC Cyclotron Decommissioning Project - Document Control Log (Example)

Document Name/Type	Document Number	Revision Number	Date Implemented	Date Cancelled	Notes/Comments