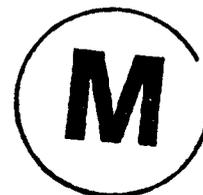


WIPP Startup and Acceptance Program



Cognizant Department: STARTUP ENGINEERING

Approved By: *Michael R. Brown for*
T. Kocinski

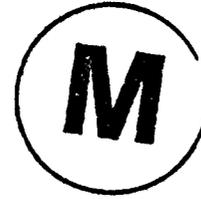


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Westinghouse Electric Corporation
Waste Isolation Pilot Plant
Carlsbad, New Mexico

WIPP STARTUP AND ACCEPTANCE TEST PROGRAM

WP 03-1, Rev. 0

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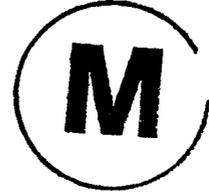


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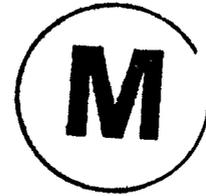
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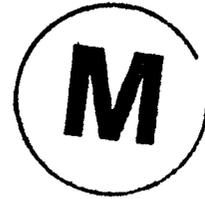


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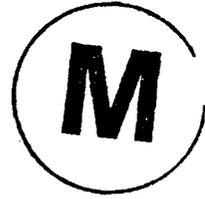
List of Procedures

<u>Procedure</u>	<u>Title</u>
WP 03-001	Preparation, Release, and Cancellation of Startup Test Procedures (Rev. 6, 06/14/91)
WP 03-002	Performance, Approval, and Closeout of Startup Tests (Rev. 0, 06/14/91)
WP 03-003	Preparation of Test Specifications (Rev. 1, 11/14/90)
WP 03-004	Preparation and Use of Startup Acceptance Tests (Rev. 0, 06/14/91)
WP 03-005	Startup Testing Documents/Records Control (Rev. 2, 06/14/91)
WP 03-006	Qualification and Certification of Startup Testing Personnel (Rev. 1, 04/17/91)

WIPP STARTUP AND ACCEPTANCE TEST PROGRAM

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Change History

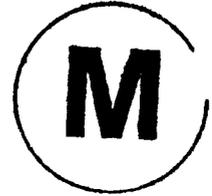


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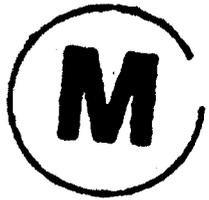
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List of Acronyms

AQMS - Air Quality Monitoring System
ECO - Engineering Change Order
ES&H - Environment, Safety, and Health
FOSS - Facility Operations Shift Supervisor
FSAR - Final Safety Analysis Report
HVAC - Heating Ventilation Air Conditioning
MRC - Master Records Center
MSE - Manager Startup Engineering
PCR - Procedure Change Request
PDH - Portable Diesel Hoist
PWR - Plant Work Request
QA - Quality Assurance
STC - Startup Test Coordinator
STE - Startup Test Engineer
TE - Test Exception
TP - Test Procedure
U/G - Underground
WIPP - Waste Isolation Pilot Plant



1.0 INTRODUCTION

1.1 OVERVIEW

Startup is a process which verifies and documents that systems and components operate per design in accordance with specifications and/or other Design Basis documents. The Startup Test Program is a program mandated by the Waste Isolation Pilot Project (WIPP) Final Safety Analysis Report (FSAR) and NQA-1.

The three basic engineering test processes and documentation methods used at the WIPP are Startup Test Procedures, Acceptance Tests, and Design Development/Verification Tests. Other test terminologies that will be encountered in the following descriptions are supplemental in nature or become included as portions of the three basic methods. The use and requirements of each of these three basic methods are detailed in individual administrative procedures and are briefly described here.

Startup Test Procedures - A Startup Test Procedure is a test or series of tests created by the Startup Engineering group that, upon performance, verify and document the operability of the subject being tested. Startup tests are written and performed by Startup engineers. They conform to a rigid style and format and are prepared to legal and auditable standards. Startup Test Procedures are controlled and implemented by WP 03-001, Preparation, Release, and Cancellation of Startup Test Procedures, and WP 03-002, Performance, Approval, and Closeout of Startup Tests. Startup Test Procedures are specifically written to test the subject system(s) against the engineering and design specifications that are documented by the cognizant technical engineering group in a formal Test Specification document. The Test Specification document is established in accordance with WP 03-003, Preparation of Test Specifications. Startup Test Procedures and Test Specifications are controlled documents. This control is described and mandated in accordance with WP 03-005, Startup Testing Documents/Records Control. Startup group personnel are qualified and certified to standards established by ASME NQA-1-1989, Quality Assurance Program Requirements for Nuclear Facilities. The certification process is controlled through WP 03-006, Qualification and Certification of Startup Testing Personnel.

Acceptance Tests - The Acceptance Test format provides an alternate method for documenting that Startup testing functions have been performed, other than the Startup Test Procedures method. The implementing and authorizing procedure is WP 03-004, Preparation and Use of Startup Acceptance Tests. The Acceptance Test process recognizes and effectively documents that testing meeting the required standard has been performed during manufacture or elsewhere so that duplication can be avoided. This is accomplished through research and the compilation of documents verifying performance to the acceptance criteria. The WIPP Acceptance Test Report is the finalizing document (similar to the final report in a Startup Test Procedure) that, upon approval by the required signatories, provides acceptance and turnover of the subject equipment or system.

Acceptance criteria are required for all Startup test processes. Acceptance criteria can be formalized and documented by the cognizant engineering group in Test Specifications in accordance with WP 03-003, or can come from other sources such as Purchase Specifications, Engineering Specifications, Design Specifications or other approved engineering documents.

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A qualifying condition for the use of the Acceptance Test method is the quality or certifiability of the criteria testing documents and the nature or function of the equipment involved. The use of the Acceptance Test is generally most appropriate for equipment or systems that perform stand-alone functions without interfaces with other WIPP systems. In the case where interfaces are present, the systems should be tested via Startup Test Procedures.

Design Development/Verification Tests - The cognizant technical engineering group that has the design responsibility for a subject system also is responsible for the Design Development/Verification Tests as described in the Engineering department implementing procedures. Various testing methods may be incorporated into the Design Development/Verification Tests including Prototype Qualification Tests, Production Tests, Proof Tests, Construction Tests, etc.

1.2 STARTUP TEST PROGRAM DESCRIPTION

The Startup Test Program is a program mandated by the WIPP FSAR and NQA-1. The Startup Test Program establishes and implements administrative controls to verify and document that equipment and systems important for continued safe operation of the WIPP facility meet or exceed established design criteria, as well as prove functional and safety requirements. These administrative controls provide the guidelines and requirements for performance of testing, identify responsibilities, and also define the methodology used to verify that systems and equipment that require Startup testing meet established design criteria. These methods include, but are not limited to, the following:

- The preparation and approval of Startup Test Procedures
- The execution and conduct of Startup testing
- The control of documents and records
- The certification of test personnel

1.3 ORGANIZATIONAL STRUCTURE

The Startup Engineering Group is an integral part of the Engineering department. The Manager Startup Engineering (MSE) reports to the Engineering Manager. Reporting to the MSE are the Startup Engineer(s) and all Startup test personnel assigned to the Startup Engineering Group. The organizational structure is depicted in Figure 1.

1.4 ORGANIZATIONAL RESPONSIBILITIES

Startup Engineering is specifically responsible for the following during the course of Startup test activities:

- Coordinating all startup activities at the WIPP facility.
- Providing assistance to other departments to identify the scope of testing required to verify that equipment and systems meet established design criteria, environmental and safety requirements, and operability requirements.



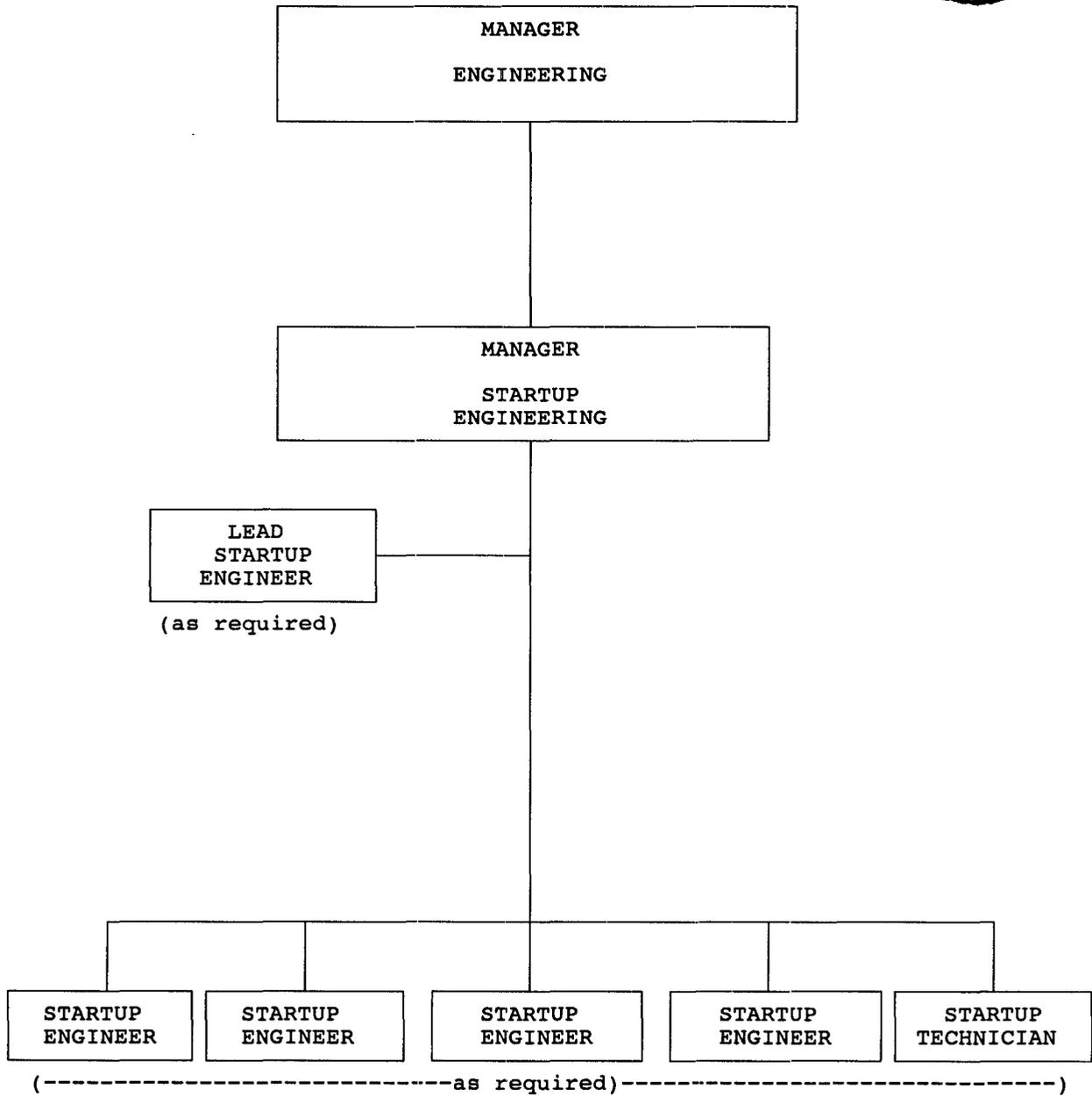
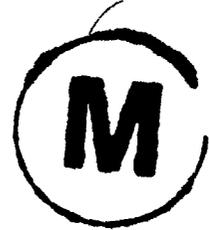


FIGURE 1. STARTUP ENGINEERING GROUP ORGANIZATIONAL STRUCTURE



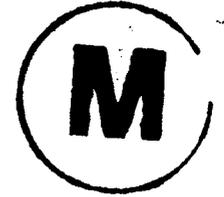


- Preparing TPs from Test Specifications provided by the cognizant engineering department.
- Obtaining approval of prepared TPs.
- Providing for the certification of Startup test personnel to established qualification requirements.
- Performing approved TPs by qualified personnel under the direction of a cognizant Startup Engineer.
- Reviewing plant modifications to identify Startup testing or retest requirements.
- Issuing, maintaining, and controlling all official Startup test documents and Startup records until transferred to the Engineering File Room.
- Providing the administration and control of changes of Startup Test Procedures.
- Providing for the identification and tracking of Startup Test Procedure items.
- Providing assistance to Engineering and Maintenance to resolve Test Exceptions (TEs) and open items.
- Providing for the review and approval of completed Startup Test Procedures and test reports by qualified personnel.
- Providing for turnover of successfully tested equipment and systems to the Operations department.

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2.0 RESPONSIBILITIES



2.1 MANAGER STARTUP ENGINEERING (MSE)

The MSE is responsible for the following:

- The implementation and administration of the Startup Test Program.
- Ensuring Startup Test Procedures are prepared, reviewed, and approved in accordance with the requirements of the FSAR, QA Program, and approved Startup Administrative Procedures.
- Ensuring that all Startup activities are conducted in accordance with the requirements of the FSAR, QA Program, and approved Startup Administrative Procedures.
- Ensuring that all Startup test documents/records are controlled in accordance with the requirements of the FSAR, QA Program, and approved Startup Administrative Procedures.
- Ensuring that personnel designated to perform Startup test activities are qualified to perform those activities according to the requirements of the FSAR, the QA Program, and certified in accordance with the approved Startup Administrative Procedures.

2.2 STARTUP TEST ENGINEER (STE)

The STE is responsible for the following:

- Preparing required Startup Test Procedures in accordance with WP 03-001.
- Coordinating and scheduling activities and/or personnel to support the Startup testing for which the STE is responsible.
- Conducting a pre-test briefing for all personnel associated with a specific test.
- Performing and/or directing the performance of Startup test activities in accordance with WP 03-002.
- Maintaining control of Startup documents/records in accordance with WP 03-005 during the course of Startup testing.
- Obtaining the proper qualification or certification required to perform assigned Startup activities in accordance with WP 03-006.
- An STE may be designated lead engineer by the MSE, as necessary, to perform specifically assigned duties and to assist in administration.

2.3 STARTUP TEST COORDINATOR (STC)

The STC may also be the Startup Technician and is responsible for the following:

- Issuing and tracking TP numbers in accordance with WP 03-005.



- Issuing and tracking Test Specification numbers in accordance with WP 03-005.
- Tracking ECO reviews.
- Providing an interface between the Startup group and appropriate Engineering, Maintenance, Operations, and Planning/Scheduling group(s) to schedule Startup activities.
- Routing Startup Test Procedures for review and approval.
- Issuing, maintaining and/or storing "Official Test Copy" Startup records and documents, and the control of "Official Test Copy" and other Startup stamps in accordance with WP 03-005.

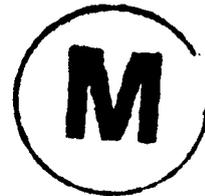


2.4 STARTUP TECHNICIAN

The Startup Technician is responsible for the following:

- Providing assistance to the Startup Engineer(s) as required for the preparation, coordination, scheduling, and performance of Startup test activities.
- Ensuring that all equipment needed for each test is available, operable, calibrated as necessary, and staged for the performance of scheduled tests.



3.0 QUALIFICATION AND CERTIFICATION OF TEST PERSONNEL**3.1 STARTUP ENGINEERING GROUP PERSONNEL**

Personnel assigned to the Startup Engineering Group who perform testing, direct testing, evaluate test results, or approve test results must be qualified and certified in accordance with the WIPP FSAR, Section 11.10.1.7; WIPP Quality Assurance Program, Section IX, paragraph 2.4, and WP 03-006.

3.2 OTHER TEST PERSONNEL

Personnel providing support for Startup testing and/or test activities will possess the qualifications necessary to perform the required support function. The department from which test support personnel are assigned is responsible for the qualification documentation in accordance with established training requirements described in WP 03-006.



4.0 STARTUP PRETEST AND TEST ACTIVITIES



4.1 TEST SPECIFICATIONS

Test Specifications are documents prepared by the cognizant engineering group that define test requirements and acceptance criteria for equipment and systems that require Startup testing to verify design, construction, safety, and/or operation.

The information provided by the Test Specification is used as the basis for preparing Startup Test Procedures. Test Specifications will be prepared in accordance with WP 03-003, and as a minimum, will contain the following information:

- Purpose of the test
- Test actions, parameters, and requirements
- Facility conditions required for testing
- Special equipment required for test performance
- Scope and boundaries of the test
- Acceptance criteria by which the success or failure of the test may be determined
- Data required to determine if acceptance criteria is met
- Information or predictions which would aid in the preparation and/or performance of the TP

Test Specifications are reviewed and approved by the group responsible for the preparation of the Test Specification and the cognizant operating group (Surface Operations, Underground Operations, or Health Physics).

4.2 PREPARATION OF STARTUP TEST PROCEDURES

When the need for a Startup test is identified to Startup Engineering, the MSE will initiate a request for a Test Specification to the cognizant engineering group, and will assign responsibility for the preparation of the TP to an STE.

Upon receipt of the Test Specification, the STE assigned will begin preparation of the TP in accordance with WP 03-001.

The TP will:

- Be prepared in accordance with approved Startup Administrative Procedures.
- Reflect requirements for testing established by, but not limited to the Test Specifications.
- Clearly establish the scope and boundaries of the test.



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- State the objectives of the test and the prerequisites required for performance of the test.
- State limits of acceptance by which success or failure of the test may be determined.
- Require the recording of data sufficient to determine whether the limits of acceptance have been met.
- Provide for the restoration of equipment and systems to normal configuration when testing is completed.
- Provide adequate reference documentation to describe the system or component as-built configuration at the time of the test.

4.3 REVIEW AND APPROVAL OF STARTUP TEST PROCEDURES

After preparation of the TP is complete, an internal review will be performed within the Startup Engineering Group.

Upon completion of the internal review and resolution of comments, the TP will be forwarded to the following departments, as a minimum, for external review:

- The cognizant section of the Engineering department
- The QA department
- The Operations department
- The ES&H department

Upon completion of the external review and resolution of comments, the TP will be submitted for approval by:

- MSE
- Manager Engineering Section
- Manager QA

Following approval, the TP will be released for performance by the Operations department manager. The released TPs are maintained by the STC in the Startup files until the TP is scheduled for performance.

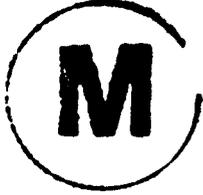
4.4 PLANNING AND SCHEDULING OF TEST ACTIVITIES

Startup test activities for individual systems or components are included in the primary plant scheduling documents as part of the subject project work requirements. Preparation of the Startup documents (Startup Test Procedures or Acceptance Tests) are prepared by Startup Engineering to coincide with the completion of construction and installation. As construction and installation completion approaches, detailed scheduling and coordination of the Startup activities is pursued through the normal periodic work and resource planning meetings. Notifications of Startup activities are provided to group managers and individuals who will be involved in the Startup tests in advance of the planned activities.



4.5 EXECUTION AND PERFORMANCE OF STARTUP TESTS

An STE is assigned responsibility for the test and will perform the test in accordance with WP 03-002 and:

- 
- Use only approved, released-for-performance TPs stamped "Official Test Copy" in red ink.
 - Ensure that required notifications are made prior to starting the test.
 - Conduct a pretest briefing for all test support personnel prior to performance of the test.
 - Ensure that test prerequisites are satisfied prior to starting of the test.
 - Ensure that required facility and equipment conditions are set prior to starting the test.
 - Ensure that the revisions of references listed in the TP are current and that any changes will not affect the test.
 - Ensure that test support personnel are available and in place prior to starting the test.
 - Ensure that the FOSS is notified of the testing schedule, the start of test performance, and any problems encountered during the test.
 - Maintain a narrative log of test activities and events.
 - Ensure that any modifications made to permanent facility equipment or systems to facilitate testing are performed and documented in accordance with approved procedures and are restored to normal configuration at the completion of the test.
 - Assemble all documents associated with the test into a test package for review and evaluation of the test.
 - Upon completion of performance of the test package, prepare a written report of the results of the test.

4.6 TEST EXCEPTIONS

If at any time during the performance of a Startup Test Procedure, a procedure step cannot be performed as written, or if stated acceptance criteria is not met, a TE will be initiated in accordance with WP 03-002 to document the problem.

The TE process establishes the corrective action and retest requirements. A determination will also be made as to whether testing may continue or should be stopped or suspended until the TE is resolved.

TEs are classified as Category I or Category II. Category I TEs are those which prevent completion of the TP and must be mitigated before the TP can be closed. Category II TEs are those items which will not affect the safe operation of the subject system or compromise any of the acceptance criteria. All reasonable efforts to close Category II TEs will be pursued; however, tracking and closure



of these TEs may be transferred to other than startup processes (i.e., Plant Work Requests (PWRs) for completion) and the TP closed.

4.7 STARTUP TEST PROCEDURE CHANGE/CANCELLATION

If it is determined that an approved Startup Test Procedure requires change, a PCR will be initiated in accordance with WP 03-002, detailing the change required.

NOTE: Obvious typographical errors and misspellings do not require a PCR and may be corrected by the STE, who will initial and date the correction and document the correction made in the Test Procedure Log. Numbers which require changing (i.e., setpoints, equipment identification numbers, etc.) are not considered typographical errors.

Procedure changes are classified as minor and major changes.

- Minor changes are changes that do not affect the technical intent of the test, the scope of the test or the acceptance criteria (i.e., steps that are out of sequence, adding steps to set conditions for obtaining data, or deleting steps which are not needed and contain no acceptance criteria).
- Major changes are changes that alter the technical intent or acceptance criteria of the test.

The PCR will receive the same review and approval as the original procedure unless the change is determined to be a minor change. Minor changes may be reviewed and approved by the MSE and the FOSS.

When approved, changes will be incorporated into the TP and the changes noted.

It will be determined during review of the PCR whether a change is sufficient or if a revision to the TP is required.

If it is determined that a Startup Test Procedure is no longer needed, the procedure may be canceled by the initiation and approval of a PCR in accordance with approved procedures.

4.8 REVIEW AND APPROVAL OF TEST RESULTS

When a Startup Test Procedure has been completed, the responsible Startup Engineer will assemble all documents associated with the test into a test package.

A review and evaluation will be performed by the STE to ensure that the test is complete, all required signoffs are signed, all required data was obtained, and acceptance criteria were met.

When the responsible STE has completed the review, a test report will be prepared to summarize the test results. The test package will then be submitted for review and approval in accordance with approved Startup procedures.

The MSE will designate a Level III STE for an independent review of test results. When the Level III STE is satisfied that test results are acceptable, he/she will



indicate by signature on the test report that the TP is recommended for approval by Startup Engineering.

The test package will then be forwarded to the QA department and the cognizant Engineering department for review.

When the QA department and cognizant Engineering group reviews are completed and comments are resolved, recommendation for approval of the test package will be indicated by signature of the department managers, or authorized designees.

When the TP results have been reviewed and recommended for approval by the Startup Engineering department, the QA department, and the cognizant Engineering department, the test package will be forwarded to the MSE for an approval signature.

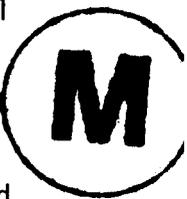
When the test package has been approved by the MSE, the test package will be forwarded to the Operations department for acceptance by Operations.

Acceptance of the test package and test results by the Operations department indicates turnover of the equipment or system within the scope of the TP to Operations.

4.9 CONTROL AND STORAGE OF STARTUP TEST RECORDS/DOCUMENTS

The MSE will assign responsibility for the control and storage of Startup test records and documents.

Startup test records will be controlled and stored in accordance with the requirements of WP 13-1, Section VI; the WIPP FSAR Sections 11.6 and 11.11; and WP 03-005. Completed and approved Startup test records and documents will be transferred to the Master Records Center (MRC) through the Engineering File Room. Copies of the test records and documents will be maintained and controlled by Engineering File Room personnel for ease of accessibility to site personnel.







5.0 ENGINEERING CHANGE ORDERS

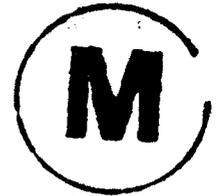
5.1 REVIEW OF ENGINEERING CHANGE ORDERS (ECOs)

Startup Engineering will review and evaluate all WIPP ECOs for determination of Startup testing requirements.

The review will determine if additional testing is required to verify the design change and/or if approved Startup Test Procedures must be changed to accommodate the design change.



6.0 INTERFACE WITH OTHER DEPARTMENTS



6.1 ENGINEERING DEPARTMENT

Engineering has overall technical cognizance and authority for WIPP facility equipment and systems. As such, the cognizant Engineering section:

- Develops, reviews, and approves Test Specifications, Design Specifications, Design Drawings, and provides accurate, up-to-date copies of these documents to Startup Engineering for the preparation and performance of TPs.
- Reviews and approves Startup Test Procedures.
- Provides assistance during the performance of Startup Test Procedures and for the resolution of any problems discovered during testing.
- Reviews and recommends approval of Startup Test Procedure results.

6.2 OPERATIONS DEPARTMENT

The Operations department is the cognizant organization for the safe operation of equipment and systems at the WIPP facility and:

- Provides input for scheduling preparations for Startup testing and turnover of required systems and equipment.
- Provides for review and release of Startup Test Procedures for performance.
- Provides assistance for the operation of equipment and systems by qualified personnel during the performance of Startup Test Procedures.
- Accepts turnover of tested equipment and systems by signature approval of the Startup test packages.

6.3 QUALITY ASSURANCE DEPARTMENT

The QA department:

- Provides a review of Startup Test Procedures to ensure compliance with QA program requirements.
- Provides assistance during the performance of Startup Test Procedures for verification of required QA Hold or Witness Points.
- Reviews and recommends approval of Startup Test Procedure results.

6.4 ES&H DEPARTMENT

The ES&H department:

- Provides a review of Startup Test Procedures to ensure compliance with safety requirements and environmental standards.



- Provides overview during the performance of Startup Test Procedures to ensure conformance with personnel and plant safety standards and environmental regulations.

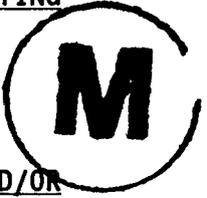
6.5 MAINTENANCE DEPARTMENT



The Maintenance department:

- Provides the calibration service for equipment and components that require testing and the testing instrumentation.
- Provides appropriate personnel to support test activities.
- Provides assistance for the resolution of problems encountered during testing.





7.0 SCOPE OF EQUIPMENT AND SYSTEM STARTUP/ACCEPTANCE TESTING

7.1 CRITERIA FOR DETERMINING EQUIPMENT AND SYSTEMS THAT NEED STARTUP AND/OR ACCEPTANCE TESTING

Section 9.2 of the FSAR states that equipment and systems important for continued and safe operation of the WIPP facility shall undergo Startup testing prior to operation.

The following criteria are used to assess the requirement for Startup testing of equipment, systems, and associated support systems that are important for continued and safe operation.

NOTE: Systems requiring Startup testing based on the following criteria are listed in Section 7.2 of this document.

- Equipment or systems which confine or measure the release of radioactive materials.
- Equipment or systems used for the receipt and/or storage of transuranic waste, and whose failure could cause a major sustained stoppage of waste handling and storage operations.
- Equipment or systems designed to ensure environmental and personnel safety at the WIPP site.

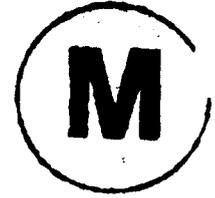
7.2 LIST OF WIPP SYSTEMS AND SUBSYSTEMS THAT REQUIRE STARTUP/ACCEPTANCE TESTING DOCUMENTATION

The systems listed below meet one or more of the criteria stated in Section 7.1.

<u>System Designator</u>	<u>System/Subsystem</u>
	<u>CA00 - COMPRESSED AIR SYSTEM</u>
CA01	Plant Air Distribution & Compression (surface)
CA02	Instrument Air
CA03	Underground (U/G) Air Distribution
	<u>CM00 - CMS SYSTEM</u>
CM00	Central Monitoring System
	<u>CW00 - CHILLED WATER SYSTEM</u>
CW01	Cooling Water
CW02	Chilled Water

System
Designator

System/Subsystem



ED00 - ELECTRICAL SYSTEM SURFACE & U/G

ED02	13.8 kV (Power Dist)
ED03	4160 (surface)
ED04	480 SWGR (surface)
ED05	480 MCC (surface)
ED06	Low Volt. Power & Control (<600V, surface)
ED08	Central UPS (surface)
ED09	Diesel Generators (surface)
ED10	13.8 kV (U/G)
ED11	480 SWGR (U/G)
ED12	480 MCC (U/G)
ED13	Low Volt. Power & Control (<600 V U/G)

EM00 - EFFLUENT & ENVIRONMENTAL MONITORING

EM01	Radioactive Effluent Monitoring
EM02	Air Quality Monitoring (AQMS)
EM03	Meteorological Monitoring (Only test inputs to CMS)
EM04	Seismic Monitoring System (Only test inputs to CMS)
EM05	VOC Monitoring

FP00 - FIRE PROTECTION SYSTEM

FP01	Fire Water Supply & Dist.
FP02	Fire Suppression System
FP03	Fire Alarm & Detection Systems

HV00 - HVAC (broken out by building)

HV01	Bldg 411 CH HVAC
HV02	Bldg 411 & 412 RH HVAC
HV03	Bldg 451 SB HVAC (CMR HVAC Only)
HV04	Bldg 413

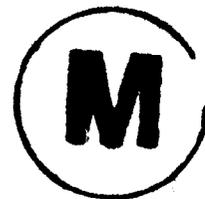
PP00 - PLANT COMMUNICATION

PC03	Plant PA & Alarm Systems
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PV00 - PLANT VACUUM SYSTEM

PV00	Plant Vacuum System
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System
DesignatorSystem/SubsystemRM00 - RADIATION MONITORING

RM01	CAMS
RM02	FAS (Units with UPS and Vacuum Pumps only)
RM03	ARMS

UH00 - U/G HOISTING SYSTEMS

UH01	Portable Diesel Hoist (PDH)
UH02	AIS Hoist
UH04	SH Hoist
UH06	Waste Hoist

VU00 - VENTILATION (U/G)

VU01	Surface Fans & Installation
VU02	U/G Booster Fans
VU03	Ventilation Control Devices
VU05	Air Access (Auxiliary Air Intake & Shafts)

WD00 - WATER DISTRIBUTION

WD01	Domestic/Utility Water
WD02	Raw Water, Storage Tanks and Chlorine

WH00 - WASTE HANDLING EQUIPMENT

WH01	TRUPACT (misc. shipping and handling)
WH02	CH Handling Equipment (Surface & U/G)
WH03	RH Handling Equipment (Surface & U/G)
WH04	Radioactive Site Generated Waste
WH05	Hot Cell

01905