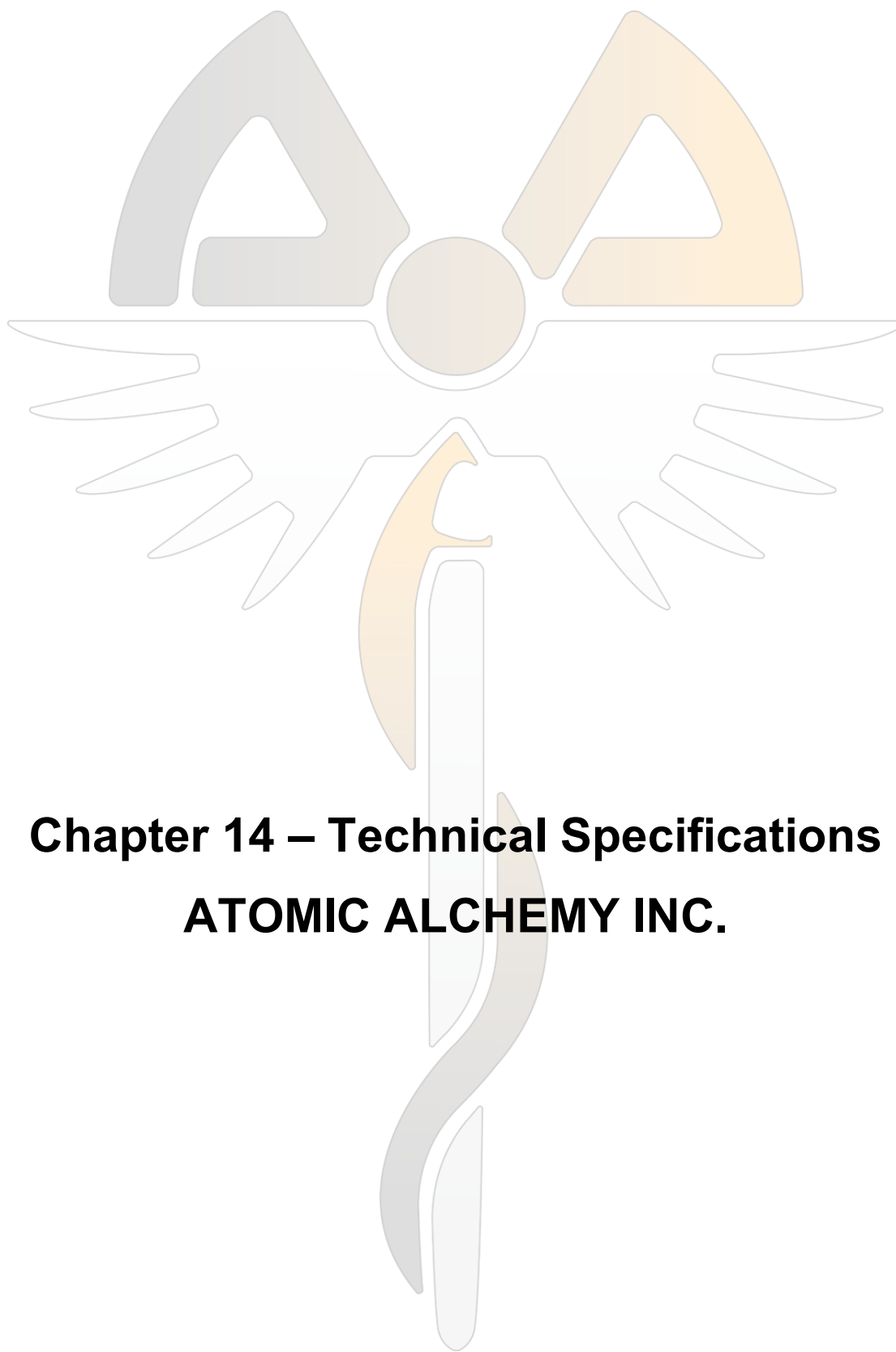




Chapter 14 – Technical Specifications

ATOMIC ALCHEMY INC.

Document Number	Revision	Approved By	Template
AAI-PSAR-14	0		TEM-003 Rev 2 (05/14/2025)



CHAPTER 14

TECHNICAL SPECIFICATIONS

AAI-PSAR-14

Rev 0

Page 14-1

TABLE OF CONTENTS

Terms	14-2
Acronyms and Abbreviations	14-2
14 Technical Specifications	14-3
14.0 Introduction	14-3
14.1 References	14-3
14.2 Appendices.....	14-3



CHAPTER 14

TECHNICAL SPECIFICATIONS

AAI-PSAR-14

Rev 0

Page 14-2

TERMS

ACRONYMS AND ABBREVIATIONS

Common acronyms, abbreviations, and units of measurements may not be included here as it is assumed the reader is familiar with their meaning.

AAI	Atomic Alchemy Inc.
CFR	<i>Code of Federal Regulations</i>
TS	Technical Specifications
VIPR	Versatile Isotope Production Reactor



CHAPTER 14

TECHNICAL SPECIFICATIONS

AAI-PSAR-14

Rev 0

Page 14-3

14 TECHNICAL SPECIFICATIONS

14.0 INTRODUCTION

This chapter discusses the development, format, and contents of the facility Technical Specifications.

The Technical Specifications (TS) represent an agreement between the licensee and the U.S. Nuclear Regulatory Commission (NRC) on administrative controls, equipment availability, operational conditions and limits, and other requirements imposed on the reactor facility operation in order to protect the environment and the health and safety of the facility staff and the general public in accordance with Title 10 of the *Code of Federal Regulations* (CFR) 50.36, "Technical specification."

Specifications refer to defined limitations and equipment requirements necessary to ensure safe operation of the reactor and production facility, as well as appropriate responses to abnormal conditions. These specifications, derived from the facility descriptions and safety analyses presented in this document, collectively define the envelope of safe operation. The TS include only those parameters and equipment requirements essential to maintaining this safety envelope. Operational procedures or actions taken to comply with the TS are not themselves part of the TS. Normal operation of the reactor within the established TS limits will not result in off-site radiation exposure exceeding the limits set forth in 10 CFR Part 20, "Standards for Protections Against Radiation."

Technical specifications regarding the Versatile Isotope Production Reactor (VIPR) can be found in Appendix A to this chapter.

14.1 REFERENCES

Nuclear Regulatory Commission. 1996. NUREG-1537, Part 1, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Format and Content."

14.2 APPENDICES

See the following attached appendices.

Chapter 14 Appendix A – Versatile Isotope Production Reactor Technical Specifications