SHIELDALLOY METALLURGICAL CORPORATION

C. SCOTT EVES VICE PRESIDENT - ENVIRONMENTAL SERVICES

> WEST BOULEVARD P.O. BOX 768 NEWFIELD, NJ 08344

TELEPHONE (609) 692-4200 TWX (510) 687-8918 FAX (609) 697-9025

-C-7102

October 12, 1995

Mr. Gary C. Comfort, Jr. Licensing Section 2 Division of Fuel Cycle Safety and Safeguards, NMSS U. S. Nuclear Regulatory Commission Washington, D. C. 20555-0001

RE: Attachment 1 to Application for Renewal of Source Material License No. SMB-743

Dear Mr. Comfort:

As per our discussion, the inclusion of the above referenced Attachment was overlooked during the preparation of the License Renewal and is enclosed with this letter. Also enclosed are Attachment 3 (Radiation Protection Program) and Attachment 5 (Methodology for Control Issue and Distribution of Radiation Safety Procedures) without the word "DRAFT" across the face of the document. I believe that this addresses the items you raised during our meeting and the subsequent telephone conversation. Please let me know if there are any additional items that need to be dealt with.

Very Truly Yours,

C. Scott Eves

cc: w/o enclosures H. Nils Schooley Jay E. Silberg, Esq. John Kinneman, USNRC Region I





Procedure No:	RSP-001	`Page:	1 of 16
Revision No.	000	Date:	October 6, 1995
Approved by (Pr	esident):		
Approved by (RS	SO):		
Approved by (Co	-Chair, RSC)	:	

TABLE OF CONTENTS

1	PURPOSE	. 2
2	SCOPE	. 2
3	REFERENCES	. 2
4	DEFINITIONS	. 2
5	PROCEDURE . Radiation Protection Organization and Administration . Facilities and Equipment . Training in Radiation Protection . Radiation Exposure Control . ALARA Program . Contamination Control . Instrumentation . Surveillance . Posting . Receipt and Control of Radioactive Material . Packaging and Transportation of Radioactive Materials . Control of Radioactive Waste . Radiation Protection Records . Documentation . Emergency Response and Notifications . Quality Assurance in Radiological Protection .	. 3 6 . 7 9 10 11 11 12 13 13 13
6	EXEMPTION PROVISIONS	14
7	DOCUMENTATION	14
8	ATTACHMENTS	14

CONTROLLED COPY NO. : _____

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 2 of 16

1 PURPOSE

The goals of the Shieldalloy Metallurgical Corporation (SMC) policy on radiological protection are to minimize the total risk of harm or injury incurred by employees, contractors, or visitors as a result of work-related licensed activities at the Newfield Plant which involve NRC regulated materials and to demonstrate compliance with applicable laws and regulations on control of radioactive materials. This Radiation Protection Program Plan (Plan) has been developed to guide generation and implementation of SMC Radiation Safety Procedures as they pertain to licensing and radiation protection issues. The following sections contain a description of the programmatic elements that constitute the SMC radiation protection program.

2 SCOPE

This procedure applies to all SMC facilities, equipment and operations at the Newfield, New Jersey site that are licensed by the United States Nuclear Regulatory Commission to possess radioactive materials. Facilities, equipment and operations that do not require a license are exempt from the requirements of this Radiation Safety Procedure.

3 **REFERENCES**

- 3.1 Title 10, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports for Workers; Inspection and Investigations"
- 3.2 Title 10, Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation".
- 3.3 Title 10, Code of Federal Regulations, Part 40, "Domestic Licensing of Source Material".
- 3.4 Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material".
- 3.5 Title 10, Code of Federal Regulations, Part 110, "Export and Import of Nuclear Equipment and Material".
- 3.6 U. S. Nuclear Regulatory Commission Source Material License Number SMB-743.

4 **DEFINITIONS**

The definition of terms used in this RSP that may not be commonly understood should be found in RSP-002, "Definitions".

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)		No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 3 of 16

5 PROCEDURE

- 5.1 Radiation Protection Organization and Administration
 - 5.1.1 President
 - 5.1.1.1 Overall control and authority for radiation protection at the Newfield plant shall rest with the President.
 - 5.1.1.2 The responsibility of the President includes, but is not limited to, the following:
 - 5.1.1.2.1 Establish SMC policy and prepare/amend this Plan accordingly;
 - 5.1.1.2.2 Appoint and empower the SMC Radiation Safety Committee (RSC); and
 - 5.1.1.2.3 Assure that the necessary resources are made available to meet the requirements of this Plan and USNRC license requirements.
 - 5.1.1.2.4 Appoint the RSO and delegates authority for the Plan to the RSO.
 - 5.1.2 Radiation Safety Officer (RSO)
 - 5.1.2.1 Implement the radiation protection program described herein.
 - 5.1.2.2 The RSO is responsible for recommending the type and quantity of staff and resources necessary for full implementation of the Plan.
 - 5.1.2.3 The RSO shall have the responsibility and authority to terminate any work activities that do or may violate regulatory or SMC requirements for radiological protection.
 - 5.1.2.3.1 Specific work activities shall be permitted to proceed to a safe condition after issuance of the stop-work order.
 - 5.1.2.3.2 Stop-work orders shall be lifted after the initiating conditions have been alleviated as described in RSP 017.
 - 5.1.3 In the absence or unavailability of the RSO, the authority for implementation of the radiation protection program described herein shall be delegated to the Alternate Radiation Safety Officer (ARSO).

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 4 of 16

- 5.1.4 Radiation Safety Committee (RSC)
 - 5.1.4.1 The SMC Radiation Safety Committee shall provide oversight for the radiation protection program.
 - 5.1.4.2 The permanent members of the SMC Radiation Safety Committee (RSC) shall include the RSO, the ARSO, the Vice President of Human Resources, the Training and Safety Manager, and the Vice President/General Manager, the Production Superintendent and a Certified Health Physicist.
 - 5.1.4.3 Depending upon the topic(s) to be addressed, the composition of the RSC may be expanded to include an environmental department representative, operations department representative, an engineering department representative, a maintenance department representative, a union steward, a Certified Health Physicist, and/or others deemed appropriate by the President or the RSO.
 - 5.1.4.4 The RSC is responsible for the review and approval of all elements of the radiation protection program and for assessing compliance with USNRC license requirements.
 - 5.1.4.5 The RSC is responsible for confirming that activities are performed safely and in a manner that will protect health and minimize hazards to life, property, and the environment.
 - 5.1.4.6 Other responsibilities of the RSC include the following:
 - 5.1.4.6.1 Monitor compliance with Radiation Safety Procedures;
 - 5.1.4.6.2 Review and approve Radiation Safety Procedures for currency and adequacy, recommending revisions as appropriate;
 - 5.1.4.6.3 Review unusual incidents involving radioactive materials or radiation-producing machines and provide recommendations on how their recurrence shall be prevented; and
 - 5.1.4.6.4 Initiate safety evaluations of all proposed uses of radioactive material or radiation-producing machines.

5.1.5 Authorized Users

5.1.5.1 The RSO may designate authority for implementing certain aspects of the radiation protection program to Authorized Users.

Minor Change Number: By: Date: / /	RADIATION PROT		ECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 5 of 16
	5.1.5.2	The follow	responsibilities and authority of Authorized Users ving:	s may include the
	5.1.5	5.2.1	Monitoring and maintaining equipment associa storage, and disposal of licensed radioactive m control.	ated with the use, naterial under their
	5.1.	5.2.2	Preparing products for shipment;	
	5.1.	5.2.3	Performing product testing;	
	5.1.5	5.2.4	Performing research and development with lic materials; and	ensed radioactive

5.1.5.2.5 Ensuring that personnel under their supervision comply with the requirements of this Plan.

5.1.6 Radiation Surveyors

- 5.1.6.1 The RSO may designate authority for implementing certain aspects of the radiation protection program to Radiation Surveyors.
- 5.1.6.2 The responsibilities and authority of Radiation Surveyors may include the following:
 - 5.1.6.2.1 Ascertain compliance with rules and regulations, license conditions, and the guidelines approved and specified by the SMC Radiation Safety Committee (RSC);
 - 5.1.6.2.2 Provide technical support for all aspects of radiation protection, including field operations;
 - 5.1.6.2.3 Monitor and maintain equipment associated with the use, storage, and disposal of radioactive material and radiation-producing machines;
 - 5.1.6.2.4 Provide consultation on all aspects of radiation protection.
 - 5.1.6.2.5 Administer and coordinate the distribution of personnel and area dosimeters on an as-needed basis;
 - 5.1.6.2.6 Maintain personnel/area monitoring records, notify the RSO of exposures approaching maximum permissible limits, recommend

Minor Change Number: By: Date: / /	RADIATION PROT	ECTION PROGRAM PLAN (NEWFIELD FACILITY) Date: 10/06/95 Page: 6 of 16
		appropriate corrective action, and evaluate exposures reported by contract dosimetry services;
	5.1.6.2.7	Perform an investigation in cases of apparent overexposure to radiation or radioactive materials;
	5.1.6.2.8	Conduct training programs and instruction in the acceptable methods for the use of radioactive materials and radiation-producing machines;
	5.1.6.2.9	Provide refresher training as appropriate (e.g., changes in procedures, equipment, regulation);
	5.1.6.2.10	Review the storage of all radioactive materials;
	5.1.6.2.11	Review the shipping and receiving of all radioactive materials;
	5.1.6.2.12	Prepare a radioactive materials inventory to assure continued compliance with the possession limits specified in the USNRC license.
	5.1.6.2.13	Review emergency response activities pursuant to RSP-016, "Emergency Response and Notifications"
	5.1.6.2.14	Perform other monitoring/surveillance tasks as directed by the RSO.
5.2	Facilities and Equipment	

- 5.2.1 Licensed radioactive materials shall be used/stored in restricted areas as shown in Attachment 1.
- 5.2.2 Temporary use/storage areas may be instituted by the RSO, subject to the provisions of RSP-012, "Control of Work".
- 5.2.3 Laboratory facilities, remote handling equipment, storage containers, shielding, fume hoods, ventilation systems, and other items may be used for controlling exposures from licensed radioactive materials.

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 7 of 16
		•

5.3 Training in Radiation Protection

- 5.3.1 All personnel permitted unescorted access to the controlled area shall be trained in radiation protection in accordance with RSP-007, "Training in Radiation Protection".
- 5.3.2 Training may consist of Hazard Communication Training, General Employee Training (GET), Radiation Worker Training, and/or special briefings, as determined by the RSO.
- 5.3.3 Other license-specific training may be substituted, at the discretion of the RSO.

5.4 Radiation Exposure Control

- 5.4.1 Radiation Dose Limits and Goals
 - 5.4.1.1 Internal and external exposure limits for employees, visitors and contractors shall be consistent with those established by the USNRC in 10 CFR 20.1201.
 - 5.4.1.2 Administrative exposure goals for monitored personnel shall be less than 2500 millirem TEDE annually.
 - 5.4.1.3 The President shall ensure that sufficient trained personnel are available to perform each operation such that administrative exposure goals are not reached.
 - 5.4.1.4 Persons under 18 years of age are not permitted access to radiologicallyrestricted areas at SMC facilities.
 - 5.4.1.5 Exposure limits for the unborn child shall not exceed those established by the USNRC for the entire gestation period.
 - 5.4.1.5.1 Any employee, contractor or visitor that has the potential for occupational exposure shall be informed of the potential effects that may result to an embryo-fetus at low exposure levels.
 - 5.4.1.5.2 Employees shall be encouraged to notify the RSO regarding "declared" pregnancies.

٠

,

Minor Change Number: By: Date: / /		RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	
		5.4.1.6 All equ site	employees with the potential to exceed 500 millirem deep dose ivalent (H_d) shall be assigned a personnel dosimeter to wear while on s .
		5.4.1.6.1	The personnel dosimetry program shall be accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).
		5.4.1.6.2	A formal investigation shall be performed by the RSO in the event that a personnel dosimeter shows an unexpected exposure or if a personnel dosimeter is lost.
		5.4.1.6.3	A written report shall be submitted to the RSC within ten working days for review and approval of follow-up actions intended to prevent the exposure or loss from re-occurring.
		5.4.1.7 All mill rad	employees with the potential to exceed 500 millirem CEDE or 5,000 irem CDE from internal sources shall participate in a routine internal iation monitoring program.
		5.4.1.7.1	The routine internal radiation monitoring program may consist of indirect bioassay sampling at the beginning and end of employment, and on a planned and periodic basis thereafter as described in RSP-010, "Exposure Control".
		5.4.1.7.2	Special monitoring may be performed whenever an administrative goal may have been exceeded, a nasal smear reveals the presence of detectable radioactivity, or whenever the RSO deems it appropriate.
		5.4.1.7.3	Routine monitoring methodologies and frequencies shall be appropriate for detecting the types and quantities of radioactive materials in use by the employee, and shall be determined by the RSO.
		5.4.1.7.4	A formal investigation shall be performed by the RSO in the event that a monitoring result is unexpected.
		5.4.1.7.5	A written report shall be submitted to the RSC within ten working days for review and approval of follow-up actions intended to prevent the exposure from re-occurring.
	5.4.2	Control of Work	

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 9 of 16

- 5.4.2.1 Routine working conditions that subject an individual to exposures that are less than 100 millirem TEDE per calendar year shall require no specific controls.
- 5.4.2.2 Control of work that may subject an individual to exposures in excess of 100 millirem TEDE per calendar year shall be accomplished by:
 - 5.4.2.2.1 Establishing radiological standards and responsibilities.
 - 5.4.2.2.2 Using authorized users and the RSO to monitor performance of radiological work.
 - 5.4.2.2.3 Training workers in recognition of radiation hazards and their responsibility to prevent their occurrence.
- 5.4.2.3 Authorized Users shall not initiate work that may subject members of the general population to exposures in excess of 100 millirem per year TEDE.

5.5 ALARA Program

- 5.5.1 While occupational radiation exposures incurred by employees or visitors of SMC historically are low, all exposures shall be assumed to entail some risk.
- 5.5.2 Management shall adopt the following three principles to govern all work activities with the potential for exposure to radiation or radioactive materials:
 - 5.5.2.1 Activities and operations shall produce a positive net benefit.
 - 5.5.2.2 All radiation exposures shall be kept as low as reasonable achievable (ALARA) in light of economic and societal costs.
 - 5.5.2.3 Radiation exposures received by individuals shall not exceed the radiation dose limits described above.
- 5.5.3 ALARA activities shall be performed as described in RSP-005, "ALARA Program".

5.6 Contamination Control

5.6.1 Loose and fixed radioactive contamination shall be maintained at concentrations that are as low as reasonably achievable (ALARA).

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 10 of 16
••••••••••••••••••••••••••••••••••••••		

- 5.6.2 Equipment, components or surfaces where loose or total (loose plus fixed) contamination is detected shall be classified as described in RSP-009, "Contamination Control".
- 5.6.3 Loose and total contamination shall be measured as described in RSP-008, "Instrumentation and Surveillance" and RSP-009, "Contamination Control".
- 5.6.4 Contaminated areas shall be clearly defined and posted.
- 5.7 Instrumentation
 - 5.7.1 Instrumentation used by the RSO, ARSO, Radiation Surveyors, Authorized Users, and other Employees shall be of sufficient sensitivity and accuracy to assess radiation exposure levels found at SMC facilities.
 - 5.7.2 Instrumentation shall be purchased, tested and calibrated by the methodologies described in RSP-008, "Instrumentation and Surveillance".
 - 5.7.3 Calibration and repair records shall be maintained as described in RSP-004, "Radiation Protection Records".
 - 5.7.4 Instrumentation used for other than radiation protection or compliance purposes are exempt from these requirements.

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 11 of 16

5.8 Surveillance

- 5.8.1 Routine exposure rate surveys, contamination surveys and air monitoring of restricted areas and certain unrestricted areas at the Newfield facility shall be performed once per calendar quarter.
- 5.8.2 Non-routine surveys may be performed at the discretion of the RSO or any time there is reason to suspect that radiation or contamination levels may have changed.
- 5.8.3 The methodology for performing surveillance activities shall be as described in RSP-008, "Instrumentation and Surveillance" and RSP-009, "Contamination Control".

5.9 Posting

Posting/labeling requirements throughout the facility shall be as described in RSP-011, "Radiological Areas and Posting".

- 5.10 Receipt and Control of Radioactive Material
 - 5.10.1 Incoming packages, known or suspected to contain radioactivity at levels significantly higher than background, shall be monitored for exposure rate and removable external contamination, pursuant to RSP-014, "Receipt, Handling and Identification of Radioactive Material".
 - 5.10.2 Radioactive material shall be marked as such to ensure proper handling and storage.
 - 5.10.3 Items identified as radioactive materials shall be maintained in a material storage area established for this purpose within a restricted area.
 - 5.10.4 Radioactive material received by SMC shall be entered in a radioactive material inventory log pursuant to RSP-014, "Receipt, Handling and Identification of Radioactive Material".
 - 5.10.4.1 The log shall be maintained to assure compliance with maximum possession limits established in the USNRC license.
 - 5.10.4.2 The source material inventory shall be updated at least once per calendar quarter to reflect changes.
- 5.11 Packaging and Transportation of Radioactive Materials

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 12 of 16

- 5.11.1 Licensed radioactive material shipped from SMC shall be packaged, surveyed, and labeled in accordance with RSP-015, "Packaging and Transportation of Radioactive Materials".
- 5.11.2 Prior to shipment of licensed materials, the RSO shall obtain confirmation that the receiver is licensed to receive the type, quantity and form of radioactive material present in the shipment.
- 5.12 Control of Radioactive Waste
 - 5.12.1 Control of radioactive waste materials should be accomplished by the following:
 - 5.12.1.1 Preventing materials from becoming unnecessarily and/or excessively contaminated;
 - 5.12.1.2 Decontaminating and/or reusing materials which may be contaminated.
 - 5.12.1.3 Monitoring materials for radioactivity and removing non-radioactive materials prior to disposal; and
 - 5.12.1.4 Using waste volume reduction techniques when practical.
 - 5.12.2 Radioactive waste may be stored on site or disposed of by one of the following means:
 - 5.12.2.1 Transfer to an authorized recipient as provided in 10 CFR 20.2001;
 - 5.12.2.2 Any other means specifically approved in advance by the USNRC.
 - 5.12.3 Manifests, Certificates of Disposal or other documentation to confirm transfer/disposal shall be maintained by the RSO pursuant to RSP-004, "Radiation Protection Records".

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 13 of 16

5.13 Radiation Protection Records

- 5.13.1 The RSO shall maintain records in order to document implementation of this Plan and to demonstrate compliance with applicable USNRC license requirements.
- 5.13.2 Records shall be maintained as described in RSP-004, "Radiation Protection Records".

5.14 Documentation

- 5.14.1 Radiation Safety Procedures shall be controlled and distributed pursuant to RSP-003, "Control of Radiation Safety Procedures".
- 5.14.2 The following Radiation Safety Procedures shall require amendment to USNRC License No. SMB-743 prior to revision or discontinuation:
 - 5.14.2.1 RSP-001, "Radiation Protection Program Plan"
 - 5.14.2.2 RSP-003, "Control of Radiation Safety Procedures"
- 5.15 Emergency Response and Notifications
 - 5.15.1 For emergencies where radioactive materials may be involved, consideration shall be given to exposure to radioactive materials and ionizing radiation in addition to the other hazards present.
 - 5.15.2 Emergency response actions shall be performed pursuant to RSP-016, "Emergency Response and Notifications".
 - 5.15.3 If it is known or suspected that an internal or external dose limit has been exceeded or that contamination levels are not as expected:
 - 5.15.3.1 The RSO shall be notified immediately.
 - 5.15.3.2 The RSO shall evaluate the likelihood and magnitude of the exposure or contamination status, and shall implement appropriate follow-up actions as soon as possible after notification.
- 5.16 Quality Assurance in Radiological Protection
 - 5.16.1 All activities conducted as part of this Plan shall be subject to quality assurance provisions.
 - 5.16.2 These provisions should include the following:

Minor Change Number: By: Date: / /	RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)	No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 14 of 16

- 5.16.2.1 Radiation Safety Procedures shall be developed to implement this Plan.
- 5.16.2.2 Limited-scope audits/assessments of the radiation protection program should be conducted by the RSO (or designee) to determine compliance with applicable federal/state regulations, applicable license requirements, and this Plan.
- 5.16.2.3 Audits/assessments of the provisions of this Plan should be performed by the Quality Assurance Department or outside contractors.

6 EXEMPTION PROVISIONS

Variances and exceptions to the requirements of this Radiation Safety Procedure shall be permitted pursuant to the written authorization of the RSO and the President and after approval by the USNRC.

7 DOCUMENTATION

None

8 ATTACHMENTS

Attachment 1 - Location Where Licensed Materials are Used/Stored at the Newfield Facility.

Minor Change
Number:
By:
Date: / /

RADIATION PROTECTION PROGRAM PLAN (NEWFIELD FACILITY)

No. RSP-001 Rev. No. 000 Date: 10/06/95 Page: 15 of 16

ATTACHMENT 1 LOCATION WHERE LICENSED MATERIALS ARE USED/STORED AT THE NEWFIELD FACILITY



· ·		Procedure No: RSP-003	Page: 1 of 12
SMC	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	Revision No. 000	Date: October 6, 1995
		Approved by (President):	
		Approved by (RSO):	
		Approved by (Co-Chair, RSC):	

TABLE OF CONTENTS

1	PURPOSE	2
2	SCOPE	2
3	REFERENCES	2
4	DEFINITIONS	2
5	PROCEDURE5.1Responsibilities5.2Procedure Format5.3Listing of Required RSP Topics5.4Review of Procedures5.5Approval of Procedures5.6Revising Procedures5.7Procedure Change Notices5.8Minor Changes5.9Procedure Cancellation	22355666778
6	EXEMPTION PROVISIONS	8
7	DOCUMENTATION	8
8	ATTACHMENTS	9

CONTROLLED COPY NO. : _____

Minor Change	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
Nulliber.		Rev. No. 000
Bv:		Date: 10/06/95
Date: / /		Page: 2 of 12

1 PURPOSE

This procedure provides instructions for the preparation, transmittal, and revision of Shieldalloy Metallurgical Corporation (SMC) Radiation Safety Procedures. Its purpose is to ensure that persons performing radiological activities are provided the most current approved procedures, and that all provisions of SMC's USNRC radioactive materials license are met.

2 SCOPE

This procedure applies to control and distribution of Radiation Safety Procedures that address activities performed in support of the Radiation Protection Program Plan.

3 REFERENCES

- 3.1 U. S. Nuclear Regulatory Commission Source Material License Number SMB-743.
- 3.2 Shieldalloy Metallurgical Corporation, Radiation Safety Procedure No. RSP-001, "Radiation Protection Program Plan".

4 DEFINITIONS

The definition of terms used in this RSP that may not be commonly understood should be found in RSP-002, "Definitions".

5 PROCEDURE

- 5.1 Responsibilities
 - 5.1.1 The President shall:
 - 5.1.1.1 Review and approve all RSPs prior to implementation.
 - 5.1.1.2 Assure that the instructions contained in RSPs are followed.
 - 5.1.2 The Radiation Safety Officer (RSO) shall:
 - 5.1.2.1 Develop and administer RSPs.
 - 5.1.2.2 Review and approve RSPs to assure compliance with USNRC regulations and license requirements.

.

Minor Change Number:		CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)		No. RSP-003
By: Date: / /				Rev. No. 000 Date: 10/06/95 Page: 3 of 12
		5.1.2.3	The RSO or designee shall train personnel on RSP required implementation.	uirements prior to
		5.1.2.4	Distribution coordination with assistance of QAD.	
	5.1.3	The Radiat compliance Radiation F	ion Safety Committee (RSC) shall review and approve all with corporate safety and operational requirements as well Protection Program Plan.	I RSPs to ensure as with the SMC
	5.1.4	A consultar	nt or Quality Assurance Director (QAD) shall:	
		5.1.4.1	Audit manual issuance and control requirements for co provisions of this RSP.	mpliance with the
		5.1.4.2	Assist the RSO in distribution coordination.	
	5.1.5	SMC perso	nnel shall:	
		5.1.5.1	Comply with all applicable RSPs.	
		5.1.5.2	Notify the RSO or an authorized user if an RSP is found or lacking sufficient detail for the activity.	d to be inaccurate
5.2	Proce	dure Format		
	5.2.1	Each page	of each RSP shall utilize the header format as shown on th	nis page.
		5.2.1.1	The header shall specify the title of the procedure.	
		5.2.1.2	The procedure number and the approval date shall be header.	e specified in the
		5.2.1.3	The page designation shall specify both the specific p number of pages of the RSP.	age and the total
	5.2.2	The format Definitions;	for all RSPs shall include seven major sections: <u>Purpose; Sc</u> <u>Procedure; Exemption Provisions;</u> and <u>Documentation</u> .	ope; References;
		5.2.2.1	The <u>Purpose</u> Section shall specify the reason for appropriate, shall denote why the activity is to be perform	the RSP and if med.
		5.2.2.2	The <u>Scope</u> section shall specify the range of activities con and any limitations on the use of the RSP.	vered by the RSP

Minor Change Number:	CONTROL OF RA	DIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 4 of 12	
	5.2.2.3 T "T	he <u>References</u> Section should include "Regulator	y References" and
	5.2.2.3.1	Regulatory References should include regulato during the preparation of the RSP or identified	ry documents used in the RSP.
	50030	Technical References should include all te	chnical standards

- 5.2.2.3.2 Technical References should include all technical standards, related in-house procedures, and regulatory guides used in the preparation of the RSP or identified in the RSP.
- 5.2.2.4 The <u>Definitions</u> section shall include the definitions of terms that are used in the body of the document that may not be commonly understood, or it may reference the definitions contained in RSP-002, "Definitions".
- 5.2.2.5 The <u>Procedures</u> Section shall contain the information necessary for the successful execution of the task being described by the RSP.
 - 5.2.2.5.1 One subsection shall identify those individuals who have responsibilities under the RSP. Responsibilities shall identify all groups and/or levels of individuals that are involved in any phase of any procedure. This includes execution of the RSP through management review of the completed task.
 - 5.2.2.5.2 Each statement describing an action to be performed should be direct and to the point.
 - 5.2.2.5.3 All instructions should be written in a manner that is clear and avoids ambiguity.
- 5.2.2.6 The <u>Exemption Provisions</u> Section shall specify the means by which variances and exceptions to the RSP are instituted.
- 5.2.2.7 The <u>Documentation</u> Section shall specify the records that shall be maintained and the length of time records shall be retained.

.

Minor Change			No. RSP-003
Number: By: Date: / /	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)		Rev. No. 000 Date: 10/06/95 Page: 5 of 12
5.3	Listing	g of Required RSP Topics	
	5.3.1	RSP-001, "Radiation Protection Program Plan"	
	5.3.2	RSP-002, "Definitions"	
	5.3.3	RSP-003, "Control of Radiation Safety Procedures"	
	5.3.4	RSP-004, "Radiation Protection Records"	
	5.3.5	RSP-005, "ALARA Program"	
	5.3.6	RSP-006, "Training and Qualifications of Radiation Protection Personnel"	
	5.3.7	RSP-007, "Training in Radiation Protection"	
	5.3.8	RSP-008, "Instrumentation and Surveillance"	
	5.3.9	RSP-009, "Contamination Control"	
	5.3.10	RSP-010, "Exposure Control"	
	5.3.11	RSP-011, "Radiological Areas and Posting"	
	5.3.12	RSP-012, "Control of Work"	
	5.3.13	RSP-013, "Control of Radioactive Waste"	
	5.3.14	RSP-014, "Receipt, Handling, and Identification of Radioactive Materials"	
	5.3.15	RSP-015, "Packaging and Transportation of Radioactive Materials"	
	5.3.16	RSP-016, "Emergency Response and Notifications"	
	5.3.17	RSP-017, "Stop Work Authority"	
5.4	Review	w of Procedures	
	5.4.1	Prior to submittal for approval, each RSP shall receive editorial and technic	cal reviews.
	5.4.2	An editorial review shall be performed by someone other than the author of th and should address clarity, grammar, punctuation, spelling, and co abbreviations.	e procedure nsistency in

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 6 of 12

- 5.4.3 A technical adequacy review shall be performed by a technically competent individual who is not directly responsible for the generation of the RSP.
- 5.5 Approval of Procedures
 - 5.5.1 All RSPs shall be approved by the RSC and signed by the President, the RSO, and the co-chair of the RSC prior to implementation.
 - 5.5.2 Approval signatures shall signify that the RSP is adequate for its intended use, that it meets the requirements of the Radiation Protection Program Plan, and that all provisions of the USNRC license are met.

5.6 Revising Procedures

- 5.6.1 RSPs shall be revised by making needed changes and resubmitting the revised RSP for the same review and approval as the original RSP.
- 5.6.2 Signed approvals for the revised RSP shall be obtained prior to implementing any changes.
- 5.6.3 The following RSPs shall not be revised without amendment of USNRC License No. SMB-743:
 - 5.6.3.1 RSP-001, "Radiation Protection Program Plan"
 - 5.6.3.2 RSP-003, "Control of Radiation Safety Procedures"
- 5.7 Procedure Change Notices
 - 5.7.1 When the need for a procedural change is identified and it is of such nature that an immediate change is required, a Procedure Change Notice (PCN) shall be used to implement the change to the RSP until the RSP can be revised and reissued.
 - 5.7.2 The originator of the PCN shall perform the following:
 - 5.7.2.1 Enter onto the standard PCN form (see Attachment 1) the needed changes, referencing by number the paragraph to be changed. Entries may be hand written or typed.
 - 5.7.2.2 Submit the PCN to the President, RSO, and RSC for review and approval.

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 7 of 12

- 5.7.2.3 Submit the signed form to the RSO or QAD for reproduction and distribution of RSPs.
- 5.7.3 The RSO or QAD shall assign a number to each PCN for a given RSP, numbered sequentially as each is submitted for production and distribution.
- 5.7.4 Copies of PCNs shall be distributed to all holders of controlled copies within one week of approval.
- 5.7.5 Temporary RSP changes shall be noted as such on the PCN, along with effective dates.
- 5.7.6 Revised RSPs with permanent changes shall be issued within six months of the procedure change approval.
- 5.8 Minor Changes
 - 5.8.1 Minor changes in RSPs may be made if approved by the RSO.
 - 5.8.2 Minor changes shall be written by hand on the affected page.
 - 5.8.3 The date and originator shall be noted at the top of the affected page.
 - 5.8.4 The RSO shall distribute the affected pages to all holders of controlled copies in a timely manner.
- 5.9 Procedure Manual Issuance and Control
 - 5.9.1 All RSPs shall be maintained under the controlled distribution system described herein.
 - 5.9.2 Authorized recipients:
 - 5.9.2.1 The RSC shall determine who is to be issued manuals to assure that all individuals needing the RSPs will have access to them in the area in which the work is to be performed.
 - 5.9.2.2 The RSO (or QAD) shall maintain the list of authorized recipients.
 - 5.9.2.3 If requested, and if a recipient name/address is provided, the USNRC shall be an authorized recipient of one copy of the manual and all RSPs.
 - 5.9.3 A master list of procedure manuals and individual procedures issued shall be maintained by the RSO or QAD.

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 8 of 12

- 5.9.4. All RSP's shall be maintained in a standardized procedure manual.
- 5.9.5. Each procedure manual shall have a unique number assigned and each RSP within the manual shall carry that assigned number (e.g. copy number).
- 5.9.6. A master list of procedure manuals and individual procedures issued shall be maintained by the RSO or QAD, including:
 - 5.9.6.1. The name of the individual to which the manual/procedure is assigned.
 - 5.9.6.2. The manual control number.
 - 5.9.6.3. The dates each manual/procedure is issued and recalled.
- 5.10 Procedure Cancellation
 - 5.10.1 If it becomes necessary to cancel an RSP, a revision shall be issued consisting of only a PCN that states that the revision cancels the RSP.
 - 5.10.2 The following RSPs shall not be canceled without prior amendment of USNRC License No. SMB-743:
 - 5.10.2.1 RSP-001, "Radiation Protection Program Plan"
 - 5.10.2.2 RSP-003, "Control of Radiation Safety Procedures"

6 EXEMPTION PROVISIONS

Variances and exceptions to the requirements of this Radiation Safety Procedure shall be permitted pursuant to the written authorization of the RSO and the President, after approval by the USNRC.

7 DOCUMENTATION

- 7.1 A historical procedure file shall be maintained for each RSP.
- 7.2 The historical file shall consist of the following:
 - 7.2.1 The signed master copy of the RSP and each revision.
 - 7.2.2 The signed original of all PCNs associated with the RSP.
 - 7.2.3 The signed original of each Minor Change.

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
	· · · ·	Rev. No. 000
By:		Date: 10/06/95
Date: / /		Page: 9 of 12

8 ATTACHMENTS

- 8.1 Attachment 1 "Procedure Change Notice"
- 2 Attachment 2 "Procedure Manual Transmittal Form"
- 3 Attachment 3 "Radiation Safety Procedure Transmittal Form"

		\bigcirc	
	RADIATION SAFETY PROCE	DURE	
Minor Change			No. RSP-0
By: Date: / /			Rev. No. 0 Date: 10/06/ Page: 10 of
	ATTACHMENT 1 PROCEDURE CHANGE NO	DTICE	
Modification to existin	ig RSP()or Supplement to exiting RSP()		
RSP Number:			
RSP Title:			
Time Period from	to		
Time Period from Specific Activities Affe	ected: to	dditional sheets as needed):	
Time Period from Specific Activities Affe Description of change	to ected: es including pages and paragraphs affected (attach a	dditional sheets as needed):	
Time Period from Specific Activities Affe Description of change Justification for change	to ected: es including pages and paragraphs affected (attach a	dditional sheets as needed):	
Time Period from Specific Activities Affe Description of change Justification for change Approved by: Pres	to	dditional sheets as needed):	mmittee (Co-Chair

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 11 of 12

ATTACHMENT 2

RADIATION SAFETY PROCEDURE MANUAL TRANSMITTAL FORM

To:

Date:

From: CRadiation Safety Officer CRAdiation Control Con

Subject: Radiation Safety Procedure Manual Issuance

Enclosed for your use is Controlled Copy No. _____ of the Radiation Safety Procedure Manual. Please note that as a controlled-copy holder, you will be issued all revisions to the enclosed procedures. If you feel you do not need this manual, now or in the future, or if you leave the employment of SMC, please return this manual to the Radiation Safety Officer (RSO). Upon receipt of this document, please sign and date this form and return it within five working days to:

□ Radiation Safety Officer (RSO)

Quality Assurance Director (QAD)

To:
□ Radiation Safety Officer
□ Quality Assurance Director

From: _____

Subject: Radiation Safety Procedure Manual Issuance

I verify by my signature that I have received the controlled manual numbered as indicated above.

Name/Date

Date:

Minor Change Number:	CONTROL OF RADIATION SAFETY PROCEDURES (NEWFIELD FACILITY)	No. RSP-003
By: Date: / /		Rev. No. 000 Date: 10/06/95 Page: 12 of 12

ATTACHMENT 3

RADIATION SAFETY PROCEDURE TRANSMITTAL FORM

Date:

To:

From:

Subject: Radiation Safety Procedure Transmittal

Attached is a new or revised copy of the procedure(s) listed below for incorporation into your Radiation Safety Procedure Manual. Within ten working days, please place the attached document(s) into your manual and remove and return all superseded documents. Procedure Change Notices (PCNs) should be placed at the front of the existing procedure and all pages retained until the next revision. When you have updated your manual, please sign and date this form and return it to the:

Radiation Safety Officer (RSO)

Quality Assurance Director (QAD)

Revision Number	Date	Pages Affected	Description of Change	
		······································		
	·····			

I verify by my signature that the above item(s) have been placed in my controlled manual and superseded procedures/PCNs have been removed and returned.

Name/Date