

CONTENTS

1.	INTRODUCTION	1
	1.1. Background	1
	1.2. Objective	1
	1.3. Scope	2
	1.4. Structure	2
2.	BACKGROUND INFORMATION ON THE CIRCUMSTANCES OF THE ACCIDENT	2
	2.1. Radiation protection infrastructure in Peru	2
	2.2. The radiography company	5
	2.3. The source, its container and ancillary safety equipment	6
3.	THE ACCIDENT	8
	3.1. Initiating events	8
	3.2. Initial exposure of the welder	10
	3.3. Exposure of the welder and his family at home	10
4.	THE EMERGENCY RESPONSE	11
	4.1. Discovery that a source was missing	11
	4.2. Search for the source	11
	4.3. Recovery of the source	11
	4.4. Response by the Peruvian authorities	12
	4.5. Response from the IAEA	13
5.	MEDICAL TREATMENT OF THE PATIENT	14
	5.1. Treatment of the patient's primary lesions in Peru	14
	5.2. Treatment in France	26
	5.3. Treatment of delayed effects and complications on return to Peru	28
6.	DOSIMETRIC ANALYSIS	33
	6.1. Dose estimates obtained by physical dosimetry	33

6.2. Dose estimates obtained by biological dosimetry	34
7. FINDINGS, CONCLUSIONS AND LESSONS TO BE LEARNED . .	35
7.1. Operating organizations	35
7.2. National authorities	36
7.3. Equipment manufacturers/suppliers	37
7.4. Medical community	37
REFERENCES	39
CONTRIBUTORS TO DRAFTING AND REVIEW	41