

Zpráva o činnosti 2008

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Annual Report 2008

Radioactive Waste Repository Authority





The Radioactive Waste Repository Authority (RAWRA) is a state organisation established under the provisions of Article 26 of Act 18/1997, on the peaceful uses of nuclear energy and ionising radiation (the Atomic Act) and on amendments to certain other Acts. RAWRA's mission is to ensure the safe disposal of existing and future radioactive waste, in compliance with the requirements of nuclear safety and human and environmental protection.

TABLE OF CONTENTS:

Managing Director's Introduction	2
Current Situation in Radioactive Waste Management	4
Operation of Low-Level Waste Repositories	8
Mining Safety and Occupational Safety	10
Licencing and Radiation Protection	12
Technical Support	16
Development of a Deep Geological Repository	18
Communication	28
Managerial, Technical, Legal and Administrative Matters	30
Financial Management	34
Auditor's Report	36
RAWRA's Board	40
RAWRA's Organisational Chart	42
Contacts	44



Mr. Vítězslav Duda Managing Director

MANAGING DIRECTOR'S INTRODUCTION

During 2008, as in previous years, the Radioactive Waste Repository Authority (RAWRA) provided for the safe management of radioactive waste in the Czech Republic, thus successfully fulfilling its statutory obligations and respecting its in-house regulations. The operation of the Dukovany, Richard and Bratrství repositories for the disposal of low-level and intermediate-level radioactive waste was undertaken in compliance with the relevant legislation and licences granted by the State Office for Nuclear Safety.

The transfer of historical radioactive waste to newly prepared chambers continued at the Richard repository following the thorough checking of the waste packages. This project followed the pilot sealing of an emplacement chamber completed in the previous year which was co-financed by the EU. A total of almost 19 thousand packages of historical waste have been checked at the Richard repository to date. A refurbished laboratory to be used for the testing of waste transport packages and containers has been put into operation at the Richard repository. Nuclear safety, radiation protection, physical protection, emergency preparedness and the maintenance of buildings, machinery and equipment were fully provided for throughout the year at all operational repositories.

RAWRA continued during 2008 to push ahead with the deep geological repository programme concerning the disposal of high-level radioactive waste and spent nuclear fuel. Research projects were carried out as part of the programme to study in detail the long-term behaviour of the waste disposal system. A large-scale project concerned with the updating of RAWRA's

Reference Project for a deep geological repository was launched during the year with the aim of consolidating the latest scientific knowledge and technologies available.

Communities in regions in which candidate repository sites are located are encouraged to actively follow and comment upon the process of updating the deep geological repository project which includes a number of considerations concerning the future construction and operation of such a repository. The project, which has been undertaken in cooperation with a respected Swedish radioactive waste disposal agency, also summarises the results of a range of research projects carried out under various EU Framework Programmes concerned with science and research. RAWRA's communications activities continued in those regions where candidate repository sites are located, however, local people continue to be overwhelmingly against the project. Their main concerns include increased radioactivity levels, the adverse impact of underground tunnelling on the environment and landscape, and a drop in land prices. Several excursions for people from local communities to selected nuclear facilities were organised during the year as part of RAWRA's ongoing communications programme. The research of former military areas in terms of their suitability for the siting of a deep geological repository commenced at the end of the year.

RAWRA, in compliance with the Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic, is responsible for the coordination of the research and development of new technologies which might enable spent nuclear fuel to be reused in new types of nuclear reactors or which might reduce the content of long-lived radionuclides. These technologies are expected to be available for commercial use after 2030.

RAWRA's administrative obligations during the year included the supervision of Nuclear Account funds paid by radioactive waste producers, the verification of estimates of the costs involved in nuclear facility decommissioning, inventory maintenance and reporting etc. RAWRA continued to keep the public up to date on its activities through its information centres, via the internet, through press releases and through various publications released during the year. In conclusion therefore, RAWRA successfully fulfilled its mission as defined in the Atomic Act and maintained the required high standards in addressing its various obligations. It is my pleasure once again to express my thanks to all RAWRA's employees as well as to our various partner organisations for their contributions towards our achieving such highly satisfactory results.

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Vítězslav Duda



CURRENT SITUATION IN RADIOACTIVE WASTE MANAGEMENT

Short-lived low-level and intermediate-level waste (LLW/ILW) makes up the largest category of radioactive waste in terms of volume. This type of waste, liquid or solid, is generated during the operation and decommissioning of nuclear reactors and when dealing with ionising radiation sources. The radioactivity content of this waste gradually decreases over a few hundreds of years and, subsequently, this waste can be disposed of in near-surface repositories. The technology for the processing and conditioning of radioactive waste prior to its disposal is well-established internationally and has been adopted in the Czech Republic.

Short-lived LLW/ILW generated at nuclear plants is stored in a surface disposal facility located at the Dukovany NPP site. The facility's total disposal capacity of 55 000 m³ (about 180,000 drums of 200 litres each) is able to accommodate all the waste that it is estimated will be generated at the Dukovany and Temelín NPPs provided that the waste meets acceptability criteria, as well as all the short-lived LLW/ILW to be stored following the decommissioning of both NPPs. In addition, this disposal facility can be partly used for the disposal of institutional waste.

Short-lived LLW/ILW generated by industry and research and medical activities is disposed of at the Richard (near Litoměřice) and Bratrství (near Jáchymov) repositories.

The Richard repository was constructed on the site of the former Richard II limestone quarry (underground, beneath the Bídnice hill). Institutional waste has been disposed of at this site since 1964. The total volume of this underground facility exceeds 17,000 m³, the disposal capacity making up approximately half that volume (the remainder being service corridors).

The Bratrství repository is designed solely for the disposal of waste containing naturally occurring radionuclides. It was constructed in a mined cavity of a former uranium mine and contains 5 chambers with an overall capacity of approximately 1,200 m³. The facility was put into operation in 1974.

The operation of all Czech repositories, including the monitoring of the now-closed Hostim repository, is undertaken by RAWRA in compliance with relevant licences granted by the State Office for Nuclear Safety (SÚJB) and, in the case of mined cavities, in compliance with permits and licences issued in accordance with mining legislation. The overall capacity of Czech repositories provides enough space for waste disposal for the next several decades. The construction of new facilities for short-lived LLW/ILW disposal is not planned; the capacity of existing disposal facilities will be exploited to the optimum level and, if necessary, their enlargement will be considered.

In addition to short-lived LLW/ILW, a certain amount of long-lived LLW/ILW is also generated; however, this waste cannot be disposed of in existing near-surface facilities. For this type of waste there are special requirements concerning the method and quality of conditioning necessary for its storage and eventual disposal in a deep geological repository (DGR). This waste is currently stored either by waste producers or by RAWRA.

High-level waste and spent nuclear fuel classed as waste are also unsuitable for disposal in existing repositories. It is envisaged that the deep geological repository will also be used for the final disposal of these types of waste. Until such time as the deep geological repository comes into operation, this waste will be stored by its producers.



The Dukovany repository consists of 112 reinforced concrete vaults arranged in four rows of 28 vaults each.



The waste drums are placed within the vaults by a gantry crane; the operator's cabin is shielded to protect the operator from radiation exposure.



Dosimetric inspection of waste to be accepted at the repository.



The safe management of radioactive waste and spent nuclear fuel is our main priority as well as an obligation set out by the Act on the Peaceful Uses of Nuclear Energy and Ionising Radiation. We use methods aimed at providing maximum protection for the public, our staff and the environment from radiation exposure and for the release of radioactive substances into the surrounding environment.





Mr. Jiří Faltejsek Deputy Director and Head of the Repository Operation Department

OPERATION OF LOW-LEVEL WASTE REPOSITORIES

The Dukovany, Richard and Bratrství repositories were operated in 2008 in compliance with the relevant legal regulations and licences granted by the SÚJB. Radiation monitoring was carried out regularly in accordance with the relevant monitoring programmes. No adverse impact on the environment was detected.

Operation of the Dukovany Repository

With regard to the day-to-day running of the Dukovany repository, RAWRA has entered into a contract with ČEZ, the Czech power company (in accordance with the Atomic Act, Article 26). Nevertheless, the acceptance of waste to be disposed of at this repository and certain other responsibilities, such as inspection, are carried out exclusively by RAWRA.

Normal repository operation includes an annual inspection of buildings and equipment, the maintenance of buildings, land, machinery and electrical equipment, radiation protection, physical protection, emergency preparedness and nuclear safety.

Vault D14 reached capacity level during the year and was sealed whilst the filling of vault D15 commenced in October.

Monitoring of the repository and the surrounding areas was performed in accordance with the approved monitoring programme; no excess radiation or breach of the rules for the safe operation of the Dukovany repository were detected. Four inspections were conducted by the SÚJB at the Dukovany repository during 2008; no serious breaches were discovered during these inspections.

Operation of the Richard and Bratrství Repositories

Both the Richard and Bratrství repositories were operated by RAWRA during 2008 in compliance with the relevant licences issued by the SÚJB and the Czech Mining Authority (ČBÚ). Normal operation of these repositories covered the inspection of the mined cavities, the maintenance of buildings and equipment, machinery, electrical fittings and land. RAWRA was also responsible, in accordance with the relevant licences issued by the SÚJB, for the physical protection, radiation protection, emergency preparedness and nuclear safety of these repositories. Historical radioactive waste was conditioned and subsequently transferred to new emplacement chambers in the underground facility of the Richard repository.

The geotechnical and hydrogeological parameters of the Richard and Bratrství repositories were regularly monitored throughout the year. Both facilities were operated in compliance with the relevant statutory safety requirements and legal regulations. Radiation monitoring of the repositories and surrounding areas was carried out in accordance with approved monitoring programmes.

RAWRA's performance was supervised during 2008 by the SÚJB (four inspections at the Richard repository and two inspections at the Bratrství repository) and the relevant mining supervisory bodies. Both repositories were declared as being under safe operation according to national legislation.

The test laboratory at the Richard repository is used to test containers designed for the transport, storage and disposal of nuclear material and radioactive emitters

(with a mass of up to 3,200 kg) as well as to test radioactive substances of special form. Two B(U) type and one A type transport packages were tested and the validity of four certificates for various types of packages was extended at the laboratory during the year. The laboratory also provided consulting services to container users throughout the year. The laboratory's total income for 2008 amounted to CZK 291,400. The Richard repository is currently being used for the temporary management of certain radioactive waste (according to an SÚJB Decision issued in compliance with the Atomic Act, Articles 26 and 31). In 2008 two Decisions were issued by the SÚJB obliging RAWRA to provide for the safe management and subsequent disposal of such sources and waste.

Waste disposed of during 2008	Dukovany repository	Richard repository	Bratrství repository
Number of waste packages (200-litre drums)	2,498	268	48
Total mass of waste packages and lump waste	468.3 t	103.8 t	15 t
Total volume of waste	510 m ³	54.2 m ³	9.6 m ³
Total activity level (at 31 December 2008)	1,331 GBq	493 GBq	23.4 GBq
Activity of alpha emitters	0.0019 GBq	0.655 GBq	23.4 GBq



Radioactivity limits for the Dukovany repository and real radioactivity levels



Mr. Jozef Harčarik Mining Operations Manager

MINING SAFETY AND OCCUPATIONAL SAFETY

The disposal of radioactive waste in designated underground facilities in accordance with mining legislation is one of RAWRA's most important responsibilities.

The rules affecting underground waste disposal are defined in the Czech Mining Authority (ČBÚ) Regulation 99/1992, Article 3. Licences for specific encroachment into the Earth's crust have been issued by the relevant regional mining authorities for the Richard and Bratrství repositories. RAWRA holds a "Licence for Mining Operations" issued in compliance with Act 61/1988, on mining operations, explosives and state mining administration, Article 17, Paragraph 4 as well as an "Authorisation for Mining Operations" issued in compliance with the same Act, Article 5, Paragraph 2.

The Mining Operations Manager, as a member of staff with the relevant expertise, is responsible for the safe and expert management of underground mining operations (in accordance with Act 61/1988, Article 6). The Mining Operations Manager is the highest authority in RAWRA's organisational structure in terms of the safe and professional management of mining operations. He systematically monitors and regularly evaluates mining safety and submits to the Head of the Repository Operation Department his requirements and suggestions for the introduction of relevant measures aimed at ensuring operational safety. He maintains and verifies the documentation required by ČBÚ Regulation 22/1989, on mining health and safety, and is responsible for emergency preparedness in compliance with ČBÚ Regulation 71/2002, on dealing with emergency situations in mines and oil and natural gas extraction facilities. All persons entering RAWRA's underground facilities are required to follow the "Instructions for Workers at the Richard and Bratrství Repositories".

The Mining Operations Manager is responsible (pursuant to ČBÚ Regulation 435/1992, on mine-survey documentation, and Act 61/1988) for maintaining statutory map-form documentation. RAWRA maintains, at present, mine-survey documentation in digital form for both the Richard and Bratrství repositories comprising, in addition to special-purpose maps (underground electrical wiring, emergency escape routes, a map intended for use in emergency situations and a drainage map), all the data required for determining the most efficient use of underground areas destined to be utilised for radioactive waste disposal.

Only that equipment which is specifically designated for underground use and has the relevant certification can be employed in the sub-surface environment. Electrical equipment must meet the requirements of Regulation 75/2002, on the operational security of electrical equipment used in mines. A RAWRA employee duly qualified in terms of the control, assembly, operation and maintenance of electrical equipment has been charged with the operation thereof.

Health and safety at work training courses are organised by RAWRA for new employees working at the Richard and Bratrství repositories and inspections aimed at verifying



the strict adherence to rules and regulations relating to health and safety at work are regularly performed. Various inspections were carried out during the year, including emergency alert exercises and fire safety exercises, in compliance with the Emergency Plan and in cooperation with the Most Mining First-Aid Station, the Regional Mining Authority in Most (for the Richard repository) and the Regional Mining Authority in Sokolov (for the Bratrství repository). Duly qualified persons were appointed by the Mining Operations Manager to be responsible for dealing with underground emergency situations; they regularly attend the relevant training courses.



The Golden Permon - a trophy awarded annually for mining safety. The trophy has been awarded since 2002 by the Czech Mining Authority to organisations subject to supervision by the Czech Mining Administration.



RAWRA received the Golden Permon award in category V (mining operations performed by organisations and companies with a maximum of 50 employees) for the operation of the Richard repository in 2008.



Ms. Soňa Konopásková Head of the Safety and Licensing Department

LICENCING AND RADIATION PROTECTION

RAWRA manages its repositories and relevant support activities in compliance with licences issued by the SÚJB and as required by the Atomic Act. Further relevant documentation required for RAWRA to operate its repositories has been approved (the licence for the Dukovany repository has been extended to 15 December 2012 and for the Richard and Bratrství repositories to 31 December 2013 and 15 December 2013, respectively).

In 2008 RAWRA obtained a licence for radioactive waste management applicable for the disposal, storage and treatment of radioactive waste at the Richard repository and a licence for the overall operation of that repository. In order to obtain these licences, the safety report on the repository was updated as were those documents which are subject to approval including Limits and Operating Conditions together with Acceptability Criteria for the Richard repository. The use of stabilising backfill material in filled chambers has been introduced and forms a new stage in the waste disposal process. The treatment and disposal of historical radioactive waste in newly prepared chambers continued throughout the year. Adherence to radiation protection criteria was reflected in the respective chapter of the updated safety report. The assessment of the consequences of so-called rare events defined in the Emergency Plan was also updated.

In 2008 RAWRA also obtained a licence for radioactive waste management applicable for the disposal of radioactive waste at the Bratrství repository and a licence for the overall operation of that repository. The safety report on the repository containing, among other things, information on operational safety and the assessment of the consequences of rare events was updated and new relevant operation documentation issued following its approval during the licensing procedure.

All the requirements relating to radiation protection (as defined by Regulation 307/2002) have been implemented at those repositories currently in operation. All staff potentially exposed to radiation are equipped with personal dosimeters and receive full medical check-ups on a regular basis. The expertise and skills of A and B category workers are regularly verified and the inventory of RAWRA-owned radiation sources regularly updated. No radiation protection breach occurred during the year. RAWRA cooperated closely with contractors working at the repositories in terms of organising training courses and regularly verifying that requirements concerning radiation protection were met.

Concerning statutory requirements for radiation protection, RAWRA co-operated closely with the SÚJB during their facility inspections and supervised the subsequent correction of any deficiencies identified relating to the observance of set limits, criteria for the safe operation of repositories and for radioactive waste management and radiation protection. Requirements defined in SÚJB Regulation 318/2002, on emergency preparedness, were satisfied.





Sampling of water to be subjected to analysis in accordance with approved monitoring programmes for the Bratrství repository.

The Richard repository - Retention reservoir - Total volume beta activity



We employ the most advanced technologies available for radioactive waste management. Special laboratory and dosimetry equipment is used to determine with great accuracy the composition of the radionuclides contained in any material. Advanced methods are also employed for radioactive waste processing and treatment as well as the operation of repositories. Thanks to longstanding international cooperation, we first acquire and then prepare for practical application the latest expertise concerning the geological disposal of high-level radioactive waste.







Mr. Miroslav Kučerka Head of the Technical Support Department

Mr. Zdeněk Laštovička Quality Manager

TECHNICAL SUPPORT

Phare and Transition Facility Programmes in 2008

RAWRA was active during the year in coordinating the "Upgrade of the RAWRA Integrated Management and Information System to Ensure Repository Safety" (CZ 182.06.01) project conducted in conjunction with the EU Transition Facility programme and relating to the use of nuclear energy.

The subject of the project was approved by the European Commission as part of the Transition Facility programme for the financial year 2006. The technical specifications for the project were prepared by RAWRA in 2007. Tender documentation was subsequently prepared by the Ministry of Finance followed by the launch of the contractor tendering procedure assisted by the Ministry. A contractor was selected in August 2008. A total of EUR 400,000 will be provided from EU funds.

Maintaining an Inventory of Accepted Radioactive Waste and Nuclear Material

RAWRA is responsible (according to the Atomic Act, Article 26, paragraph 3d) for maintaining an inventory of accepted radioactive waste and its producers. Detailed rules for maintaining such an inventory are set out in Regulation 307/2002. Records of accepted radioactive waste are maintained both in paper and electronic form. ZISS, the electronic database, contains records of all the radioactive waste accepted by RAWRA. Ongoing correction and testing of new application software "A Scheme for Monitoring and Maintaining an Inventory of Radioactive Waste" continued during the year. The new software will be based on the results of a Phare project completed in 2006 and is eventually to replace the existing ZISS. Data contained in historical accompanying documentation in paper form relating to waste accepted prior to the transfer of repositories to RAWRA, i.e. before 2000, continued to be gradually incorporated into the digital archive. Data on 141 waste producers had been recorded in the RAWRA system by the end of 2008.

RAWRA holds an SÚJB licence for the management of category II nuclear material. An inventory of nuclear material is maintained in compliance with SÚJB Regulation 316/2002 and European Commission (EURATOM) Regulation 302/2005. An inspection of the management and inventory maintenance of nuclear material was carried out at the Richard repository by EURATOM and the SÚJB in October 2008. No deficiencies were detected during the inspection. A total of 112 items of nuclear material had been recorded by 31 December 2008.

Quality Assurance and Control

Over the past few years RAWRA has been developing and constantly updating a quality assurance system the aim of which is to ensure the highest standards of performance. This system is consistent with the requirements of relevant legislation (the Atomic Act and SÚJB Regulation 214/1997, on quality assurance concerning activities related to the use of nuclear energy and radiation exposure). Quality assurance in 2008 focused both on the optimisation of basic in-house regulations with the aim of incorporating these regulations into the quality assurance system so as to be consistent with relevant ISO standards and on internal audits conducted according to a yearly plan approved by RAWRA's Managing Director.





Testing of a waste container burning test facility.



An inspection day during the refurbishment of the hot cell at the Richard repository.



Radioactive waste in an emplacement chamber at the Richard repository.



Mr. Jiří Slovák Head of the Geological Repository Development Department

DEVELOPMENT OF A DEEP GEOLOGICAL REPOSITORY

The Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic stipulates that spent nuclear fuel and radioactive waste which cannot be disposed of in existing low-level and medium-level waste repositories be finally disposed of in a deep geological repository (DGR). Proof that spent nuclear fuel will be safely disposed of for a period of tens of thousands or hundreds of thousands of years is a fundamental criterion with regard to DGR safety. Waste disposal safety is ensured by a combination of both engineered and natural (geological) barriers. The waste disposal concept itself is very simple and is based on a comprehensive knowledge of the properties of both the material used for the construction of the engineered barriers and those of the host rock during the various phases of DGR development. Geological survey information and existing knowledge of the various rock formations in the Czech Republic will provide an answer to the fundamental questions of whether and under which conditions a deep geological repository of the required safety level can be constructed at a given site.

Site Selection

RAWRA has paid close attention to deep geological repository site selection as well as to the design and verification of both the engineered and natural barriers since responsibility for the project was transferred to the Authority from the Ministries of the Environment and Industry and Trade. The site selection process to date has consisted of a number of successive stages commencing with an assessment of the suitability of various rock formations present in the Czech Republic and ending with geological research at potentially suitable sites during 2003 - 2005. However, field research aimed at the systematic evaluation of rock mass at each of the candidate locations has not yet been performed. RAWRA has made every effort to keep local communities up to date on both the planning and the results of geological research performed since 2003.

A particularly important and, for the time being, the latest stage of the DGR site selection process consisted of a comprehensive assessment of the results of the GeoBariéra project in 2005 which comprised the identification of a potentially suitable, geologically relatively stable rock mass with an area of approximately 10 km², the identification of a suitable location for the potential construction of the above-ground facilities of a future deep geological repository and a preliminary feasibility study. Proposals were put forward both for a research area to be selected which would be subjected to geological prospecting and for further stages of the site selection process aimed at selecting a suitable candidate site and a reserve site.

As a result of local public pressure, work was subsequently suspended; the Government, by means of Decision No. 550 of 2 June 2004, effectively suspended geological survey work until 2009 at all the candidate sites. This time period has been used to define conditions acceptable for both the Government and the local communities concerned so that work might continue.

The results of geological survey work carried out to date have been included in the "Land-Use Development Plan for the Czech Republic" (approved by Government Decision No. 561 of 17 May 2006) an updated version of which (the "Land-Use Development Plan 2008") should be approved during 2009. The preliminarily selected





Drill cores will be one of the most important sources of information for future deep geological repository site selection.

potential sites should be included in the above Government documentation to ensure that these sites are not threatened by land encroachment (deep drilling or underground geological surveying) which would effectively render wasted the tens of millions of Czech crowns which has already been invested in geological survey work.

In view of the overwhelmingly negative public attitude at individual candidate locations, RAWRA strives to make the site selection process as transparent as possible and to involve local communities in the final decision-making process, for example by the participation of local experts in both survey work and the subsequent evaluation of the results. Communities are thus kept abreast of RAWRA's activities locally and can present their views at any time. This approach is fully in compliance with the international Aarhus Convention on public participation in decisionmaking regarding major construction projects.

Survey work, and the subsequent assessment of the whole of the Czech Republic for the purposes of the siting of a deep geological repository, includes a number of former military areas. RAWRA began the geological research of such areas in late 2008 according to a plan approved by the Government.

Former military areas and their utilisation for DGR siting

Five former military areas currently exist in the Czech Republic: Hradiště, Brdy, Boletice, Březina and Libavá. In the first stage of the evaluation of these areas in terms of their suitability for the siting of a deep geological repository, assessment was based solely on existing geological maps and other available information. Consequently, in May 2009, the Boletice former military area in South Bohemia was chosen as the favoured location and Hradiště in North-West Bohemia as a further suitable site.

The geological conditions of each former military area are presented in the table below.

Former	Area	Geological conditions	Suitability for the siting of a DGR
military	size		
area	hectares		
Hradiště	33,161	Volcanic rocks, a seismically unstable region,	Potentially suitable complex of siltstone and
		in the vicinity of mineral springs	claystone strata in the north part, at a depth of
			570 - 750 m
Brdy	26,009	Complex of permeable and low-permeable	Unsuitable area, very small granite formations;
		sedimentary rocks; two small granite formations	unsuitable hydrogeological conditions
Boletice	21,953	Granitic rocks and a large granulite formation	Potentially suitable geological structure
		(metamorphosed granite)	
Březina	15,817	Complex of low-permeable and permeable	Unsuitable area due to the absence of suitable
		sedimentary rocks in parts tectonically fractured	rock; unsuitable hydrogeological conditions
Libavá	32,724	Complex of permeable and low-permeable	Unsuitable area primarily due to the absence of
		sedimentary rocks tectonically fractured;	suitable rock; unsuitable hydrogeological
		possible mineral springs	conditions

Key stages in the site selection process

Site selection has been carried out in compliance with the IAEA Guide "Siting of Geological Disposal Facilities". The process consists of a number of separate stages; as far as the Czech Republic is concerned, a review of those stages both completed to date and planned is provided below.

- Stage 1: Area survey. An assessment of the whole of the Czech Republic, based on available historical data. This stage was completed in April 2003.
- Stage 2: Reduction of the surface area of potential sites. This stage included geological work which did not involve land encroachment, i.e. did not include drilling or trenching and was completed in December 2005. Areas to be subjected to further geological survey work in the next stage were subsequently identified.

Stage 3: Site characterisation. In this stage, systematic (based on the use of a regular grid) geological and other measurements, sample collection for laboratory analysis and, primarily, geological work including drilling are envisaged. The commencement of this stage is planned for 2010.

Results of Stage 1 - Area survey

During 1992, 32 potential sites meeting the required geological criteria were identified by the Czech Geological Institute. As a result of further research carried out jointly by the Czech Geological Institute and the Nuclear Research Institute under the auspices of the Ministry of the Environment, the number of potential sites was narrowed down to 13 in 1998 and subsequently, following a detailed geological survey, to 8. RAWRA then took over responsibility for the project and completed a further survey of the whole of the Czech Republic according to clearly defined



criteria contained in the relevant IAEA documents. At this stage of the site selection process, meeting the requirements of nuclear safety and radiation protection, as defined in the Atomic Act, was the overriding priority. Six sites were chosen as suitable to be considered in the next stage of the siting process:

Site	Region	Geological unit	
Lubenec - Blatno	Ústecký	Čistá-Jesenice massif	
Pačejov - railway station	Plzeňský	Central Bohemia pluton	
Božejovice - Vlksice	Jihočeský	Central Bohemia pluton	
Pluhův Žďár - Lodhéřov	Jihočeský	Central Bohemia pluton	
Rohozná	Vysočina	Moldanubicum massif	
Budišov	Vysočina	Třebíč-Meziříčí massif	

Results of Stage 2 - Reducing the surface area of potential sites

The geological survey methods employed did not involve any land encroachment. Geological information was gathered using aerial geophysical methods and remote surveying performed by means of aerial photography. The combination of these two sources of information enabled reduced surface areas at the six candidate sites to be identified for the subsequent geological survey stage. A preliminary feasibility study was conducted for all the candidate sites the main aim of which was to identify the appropriate surface area for DGR above-ground facilities whilst respecting the relevant legislative considerations.

The work outlined above resulted in the reduction of the surface area of each of the sites to be subjected to further geological investigation.

The surface area of the candidate sites to be subjected to geological investigation in the next stage of the site selection process is provided in the table below (in square km).

Site and region							
Blatno	Jlatno Pačejov Lodhéřov Božejovice Rohozná Budišov						
Ústí nad Labem and Pilsen	Pilsen	South Bohemia	South Bohemia	Highlands	Highlands		
29.185	24.362	27.884	25.651	25.774	27.238		



Medium-term timetable for further stages of the main and reserve site selection process for the period to 2015

Medium-term target: The assessment of selected former military areas in terms of their suitability for the siting of a deep geological repository as well as the selection of the two most suitable sites from the five preliminarily selected potential sites (the "Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic" and the "Land-Use Development Plan 2008"), with the participation of the communities involved.

Time scale
2009
and
continuously
2010
1
2010
:
2010
2011 - 2012
2012 - 2014
2015
2015
2025

Design Activities, Research into Near- and Far-Field Processes, and Safety Assessment

The potential design of both the underground and surface area structures of a deep geological repository is an important element of the deep geological repository programme. A Reference Project for a deep geological repository to be constructed at a hypothetical site was completed in 1999; certain parts of the project were subsequently updated. Research and development in this field provided large amounts of both new and refined information. In 2008 RAWRA selected a contractor for the updating of the Reference Project; the contract was signed in early November 2008.

Research into engineered barriers (the behaviour of bentonite barriers) based on the results of the MOCK-UP long-term experiment at the Centre for Experimental Geotechnics at the Czech Technical University in Prague is now completed. The focus of the research was on a comprehensive evaluation of the behaviour of bentonite of Czech origin. Research into near-field processes in deep geological repositories, which began in 2005, has also been completed. The aim of the research was to establish the scientific and technological basis for an assessment of near-field safety. The work was carried out, on a contractual basis, by the BP-Bariéry consortium. The research focused on testing the methodology employed for studying the degradation of spent nuclear fuel, the corrosion of disposal packages and the degradation of bentonite; in addition, the uncertainties of determining adsorption and diffusion coefficients of radionuclides in bentonite were assessed. As regards other projects, research focused on the modelling of processes occurring in a repository and the verification of computation codes





A visit to the Rožná II mine as part of the preparation stage of a research project concerned.

for the modelling of processes occurring within the waste disposal system. The development of specific source term models employing commercially available GoldSim computation code continued.

The preliminary partial results of the "Research into Processes in the Far-Field Environment of a Deep Geological Repository for the Disposal of Spent Nuclear Fuel and High-Level Waste" project were peer reviewed in 2008. The aim of the project is to establish the scientific and technological basis for an assessment of the major functions of the far-field environment - natural barriers. The project has provided important new knowledge relating to the assessment of the function of the natural barrier in ensuring the maximum possible safety of the waste disposal system. The natural barrier should provide an environment which enables the engineered barrier system to provide effective isolation in the long term. The project is being carried out by the G-Consortium. A number of smaller projects supporting the major projects outlined above were completed during the year, e.g. the "Study on the Influence of Organic Mass on Uranium Migration" and the "Study on the Dynamics of the Fracture Network in Water Supply Tunnels in the Jizerské Mountains" projects. The data sets obtained on the properties and behaviour of granitic rock will be used in modelling the transportation of radionuclides in rock masses.

A further project was concerned with the reinterpretation and digitisation of data from previous geological research at the six potential DGR localities. The project will result in detailed geologic and structure maps at a scale of 1:10,000 to be used both for refining future locality polygons and research planning.



Ms. Věra Šumberová Research Project Manager

Supporting Research Projects

The Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic requires that in addition to the development of a deep geological repository, the progress of separation (partitioning) and transmutation technologies be monitored and supported. Such technologies allow the separation of long-lived radionuclides from spent nuclear fuel and their subsequent transmutation into more stable isotopes. Such technologies, used on an industrial scale, will bring about a significant reduction in the amount and, perhaps more importantly, the radiotoxicity of waste disposed of in a deep geological repository. With the support of ever more efficient technologies, basic requirements placed on a future deep geological repository will be eased: the time required for the waste disposed of in the repository to be isolated from the environment will be reduced as will be the size of the underground part of the repository due to lower heat development. Consequently RAWRA, in line with the Government's concept, wholeheartedly supports research in this field.

A total of six projects relating to the above technologies were carried out by RAWRA during 2008. The "Testing of the Technological Usability of New Boric Extraction Agents" project concerning separation and which involved the testing of three groups of unique extraction agents for the hydrometallurgical extraction of actinides and certain other fission products from aqueous solutions following spent nuclear fuel reprocessing was completed. The "Study on Electrochemical Separation Processes in Fluoride Melts" project was launched. The subject matter of this project is wider than its title indicates and involves the study of the current state of the development of pyrochemical separation technologies in Europe and an experimental study of the electrochemical behaviour of selected elements in fluoride melts. Pyrochemical methods are studied as an alternative to the hydrometallurgical reprocessing of spent nuclear fuel and as a reference reprocessing method for molten salt reactors.

Two projects with the long-term aim of developing a demonstration SPHINX nuclear transmutor using fluoride salt-based liquid fuel were completed in 2008. The projects focused on the experimental verification of elementary module behaviour both during critical experiments (in the VR-1 reactor at the Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University in Prague) and during the passage of neutrons from a cyclotron-based neutron generator at the Nuclear Physics Institute of the Czech Academy of Sciences. The values of neutron characteristics measured were compared with calculated values. Activation detectors were used to study the neutron field. Students specialising in nuclear physics were involved in the project.

The "Development, Fabrication and Non-Active Testing of Selected Elements of Transmutation Modules under High Temperature" project commenced in 2008. This project represents one of the final stages in the verification of the behaviour of fluoride-salt-based fuel in nuclear reactors and is aimed at obtaining realistic data for the design of a demonstration transmutation reactor working on fluoride salt-based liquid fuel. A particular aim of the project is the development, fabrication and testing of a universal inactive laboratory loop with molten salts and forced circulation which will be tested under high temperature and will demonstrate the functionality and safety of such a solution.





Installation of the BLANKA3 inactive loop at the ADTT laboratory at the Nuclear Research Institute at Řež. This inactive loop contains a fluoride mixture typical for molten salt reactors and preceeds an active loop to be installed in the LVR-15 reactor (in neutron and high-level gamma radiation fields).



The FANTOM module containing graphite and fluoride salts installed near a cyclotron at the Nuclear Research Institute at Řež. The cyclotron together with the beryllium target serve as an external source of neutrons for the irradiation of this module.



Experimental equipment for studying electrochemical characteristics at the Nuclear Research Institute at Řež – nickel electrolyser installed in dry box.

We provide regular information on our activities and objectives concerning the safe disposal of radioactive waste. The public has the right to know the risks relating to the operation of nuclear installations and their impact on the environment. Comprehensive environmental impact assessments of nuclear installations could provide the basis for well-balanced and transparent communication with the public. We are committed to effective dialogue with local residents and local authorities in those areas affected by our current and future operations.





Ms. Lucie Steinerová Head of the Communications Department

COMMUNICATION

The free availability of information on radioactive waste management is a necessary precondition for a full discussion involving all the parties interested in finding the best way to tackle the issue of high-level radioactive waste and spent nuclear fuel in the Czech Republic in the future. RAWRA has traditionally aimed to enhance the public's awareness of radioactive waste and its management in the Czech Republic. The internet and RAWRA's information centres are the main channels of communication employed to provide the relevant information. The Prague information centre provides both individuals and groups of visitors with multimedia presentations, display posters, models, film clips and printed materials throughout the year. RAWRA's specialists are ready at any time to answer questions relating to radioactive waste, its generation and management. Over 1,050 young people from primary and secondary schools and universities in Prague and other areas of the country visited RAWRA's information centre in Dlážděná Street, Prague during 2008. RAWRA maintains good relations with stakeholders, particularly with the local populations of those areas in which operating repositories are situated. Establishing and improving good relations with local populations in areas potentially eligible for the construction of a deep geological repository is a no less important function of RAWRA's public relations specialists and managers. Representatives of municipalities in which low-level and intermediate-level radioactive waste repositories are located (Litoměřice, Jáchymov and Dukovany) are permanent members of RAWRA's Board.

The RAWRA information centre at the public library at Rouchovany was modernised and furnished with new equipment in 2008. Similar information centres were set up at a number of other villages — Lubenec, Rohozná and Dolní Cerekev. Display posters as well as printed materials and various relevant film clips are available to provide visitors with a wide range of information. A number of computers allow access to information provided on RAWRA's website and those of other domestic and foreign organisations responsible for radioactive waste management.

A further excursion to Sweden was organised in 2008 for representatives of local communities in areas in which candidate repository sites are located. Participants visited the Äspö underground laboratory, met representatives of a local civic association and were provided with the opportunity to become familiar with the modern technologies employed at a deep geological repository. RAWRA also provided excursions to domestic facilities, namely the Richard and Dukovany low-level and intermediate-level waste repositories; a number of foreign specialists visited these facilities during the year.

A reference group was established during the year as part of the European ARGONA (Arenas for Risk Governance) project. Its members meet regularly and have been active in developing a scheme for involving the general public in the siting of a deep geological repository based on RISCOM, the Swedish communications model. Membership of the group consists of representatives of the relevant municipalities, the Ministry of Industry and Trade, the Ministry of the Environment, the State Office for Nuclear Safety, the Calla association, the Institute of Sociology of the Czech Academy of Sciences, the Nuclear Research Institute at Řež and RAWRA specialists.

RAWRA has a statutory obligation to provide information according to Act 109/1999, on free access to information. No applications for information under the Act were received during 2008.



Prague information centre.

International Cooperation

The issue of radioactive waste management has to be satisfactorily addressed in each and every country employing ionising radiation sources. Broad international cooperation has been established to deal with this demanding and complex issue. International institutions generally co-ordinate radioactive waste management activities, put forward legal and regulative initiatives and form a platform for meetings of specialists and the exchange of information. The most important aspects of international cooperation as far as RAWRA is concerned include the testing of methods for the assessment of repository safety, the demonstration of the feasibility of deep geological repositories and the development of new technologies. Since the Czech Republic is a signatory to the IAEA Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, RAWRA together with the SÚJB share the responsibility for meeting the requirements defined in this Convention.

Radioactive waste management issues are also handled by the OECD–NEA, specifically its Radioactive Waste Management Committee (RWMC). The RWMC is organised in the form of internal and external working groups. RAWRA specialists represent the Czech Republic on the RWMC as well as in the Integration Group for Safety Case (IGSC) and the Forum on Stakeholder Confidence working groups. RAWRA organises and in some cases finances the participation of Czech representatives in specific projects. RAWRA is also involved in the activities of the European Commission relating to radioactive waste management.

Concerning bilateral cooperation, RAWRA is keen to establish direct links with foreign organisations similarly involved in radioactive waste management to the mutual advantage of both parties. Framework cooperation agreements have been signed between RAWRA and NAGRA (Switzerland) and POSIVA (Finland) amongst others and RAWRA has been involved in specific joint projects with SKB (Sweden).



Ms. Jaroslava Liehneová Personnel and Internal Audit Manager

MANAGERIAL, TECHNICAL, LEGAL AND ADMINISTRATIVE MATTERS

In addition to those outlined above, RAWRA is involved in a whole range of additional activities either in connection with its main area of business or as required by relevant legislation.

Internal Control System

RAWRA's internal control system was adopted in compliance with Act 320/2001, on financial control. RAWRA's internal control system is defined in the following basic management directives: the Handbook on RAWRA's Control System; the Standing Orders; the Internal Auditing System; and Principles of Asset Management. These documents specify the responsibilities of individual departments, the competences and responsibilities of the management and executives, as well as the main audit principles and methods to be adopted by RAWRA's management. Based on these management directives, a number of in-house regulations have been drawn up which set out the rules governing individual activities.

Management control as specified in Articles 26 and 27 of Act 320/2001, i.e. preliminary, continuous and follow-up control, is ensured by responsible managers as part of the internal control system. RAWRA's work is governed by the yearly plan of activities, the budget approved by the Government and the principles of the internal control system. The Authority's financial management is supervised by RAWRA's Board the membership of which comprises 11 representatives from state administration bodies, radioactive waste producers and the public. The Authority's financial management is supervised by RAWRA's Board. Internal audits are performed, as stipulated in Articles 28 and 29 of the Act, by the internal auditor who is directly responsible to the Authority's Managing Director. Internal audits during 2008 were conducted according to a yearly plan approved by RAWRA's Managing Director.

The internal auditor's recommendations, based on audit results, were aimed at improving management procedures within the Authority, at strict adherence to internal control system rules and the updating of internal regulations to reflect changes in legislation.

A report on the results of the various internal audits and the efficiency of the internal auditing system was prepared in accordance with Regulation 416/2004 and submitted to the appropriate department of the Ministry of Finance which is the administrator of the relevant budget chapter.

Auditing Licensees' Decommissioning Reserves

RAWRA is responsible (according to the Atomic Act, Article 26, paragraph 3h) for ensuring, by means of an audit, that relevant licence holders honour their obligation (Atomic Act, Article 18, paragraph 1h) to create financial reserves for the future decommissioning of their facilities.

Audits were conducted at 13 organisations comprising a total of 33 facilities. Audits aimed at verifying the accumulation of financial reserves were conducted in

2008 under the same rules as in the previous year. Audits were performed in cooperation with the respective licence holders and requests by RAWRA for supplementary documentation were duly met.

A report for 2007 on audits performed to verify the creation of financial reserves for the future decommissioning of nuclear plants and other nuclear facilities was duly prepared and presented to RAWRA's Board and the SÚJB in accordance with RAWRA Statutes.

Staffing and Premises

RAWRA had 40 employees at the year end, including 1 employee on maternity leave. As regards the staff educational profile, more than half the staff are university-educated employees while the rest have completed full secondary school education. A total of 28 one-off contracts for work concerning particularly peer and expert reviews on current projects were signed during 2008. A number of fixed-term employment contracts were also signed. As of 31 December 2008, RAWRA had 5 employees working under such contracts.

RAWRA's staff attended various training courses in compliance with legislative requirements; these courses related to obligatory professional training, the further improvement of qualifications and language training. RAWRA's statutory obligations concerning health and safety at work and fire protection (the Labour Code and the Fire Protection Act) were met by employing a specially qualified person. RAWRA fulfilled its obligation set out by Act 435/2004 (the Employment Act) concerning the obligatory proportion of handicapped persons employed on the staff. Two handicapped persons were employed at RAWRA during 2008.

Contributions were made from the cultural and social needs fund (created pursuant to Regulation 114/2002) towards the cost of meals and supplementary pensions as well as towards the organisation of cultural and sports events. Furthermore, the cost of vitamin preparations for RAWRA employees was covered from this fund as well as birthday and retirement bonuses.

Since the end of 2000 RAWRA's head office has been located in a completely refurbished Interior Ministry building at Dlážděná Street 1004/6, Praha 1 and is equipped with the office technology and company cars required in order to meet its various responsibilities.

Respons

We are well aware of our responsibility for the results achieved and for RAWRA's efficient financial management. Our performance is subject to regular quality control. Reports on repository operation and impacts on the environment are submitted both to inspection authorities and the general public.





Mr. Milan Dvořák Deputy Director and Head of the Economics and Administration Department

FINANCIAL MANAGEMENT

RAWRA's activities are financed principally from Nuclear Account funds and grants from the state budget (in accordance with the Atomic Act, Article 28, paragraph 1) for the management of that radioactive waste disposed of prior to the Atomic Act coming into force.

RAWRA is authorised to manage state property and consequently maintains the relevant accounts in pursuance of Act 563/1991, on accounting; Act 218/2000, on budgeting rules; and implementing Regulation 505/2002. RAWRA's budget is determined according to a budget structure defined by Ministry of Finance Regulation 323/2002.

RAWRA holds no assets of its own, effects no depreciation of fixed assets, creates no reserves, is not a payer of income tax (in terms of Article 18/2c, Act 586/1992), nor of value added tax, and makes no profit. All its revenues

RAWRA expenses in 2008 (CZK 000)

from services provided to radioactive waste producers as well as unused budget funding are returned to the Nuclear Account at the year end.

Expenses are subdivided into current expenses and capital expenses. Expenses relating to technical development projects, materials purchased and utilised, telecommunications services, rental payments, education and training, consultancy services, travel expenses and the purchase of external services are included in current expenses. Expenses relating to the deep geological repository programme, reconstruction of existing repositories, investment in information technology and others are included in capital expenses. A detailed review of the utilisation of budget funding by individual item, accompanied by a commentary, has been submitted to RAWRA's Board.

	Current expenses	Capital expenses
Dukovany repository	13,554	0
Richard and Bratrství repositories	14,936	7,157
Deep geological repository	1,912	36,155
Managerial and administrative matters	21,681	1,355
Grants to the Rouchovany, Litoměřice and Jáchymov municipalities	4,500	
Total expenses	56,583	44,667

Administration of Nuclear Account Funds

The administration of Nuclear Account funds was governed in 2008 by the Atomic Act, Article 27, Government Decree 416/2002, on the scale of charges and manner of payment by radioactive waste producers to the Nuclear Account and on annual contributions to local communities, and Act 337/1992, on the administration of taxes and levies, as amended. Detailed records were kept on individual contributors to the Nuclear Account (in compliance with Government Decree 416/2002, Article 3).

Payments by producers of radioactive waste from nuclear reactors

Pursuant to Government Decree 416/2002, Article 1, ČEZ contributed CZK 1,327,547,000 while the yearly contribution made by the Nuclear Research Institute was CZK 696,000. Both amounts were paid in regular monthly instalments which were made directly to the Nuclear Account.

Payments by other producers of radioactive waste Other waste producers, as specified in Article 2 of Government Decree 416/2002, paid their charges following acceptance of their waste for disposal by RAWRA. Payment notices were issued to each waste producer (based on a contract between RAWRA and the respective waste producer) on acceptance of the radioactive waste accompanied by the relevant waste acceptance documentation. The total sum paid in 2008 amounted to CZK 6,268,500.

Disposable funds in the Nuclear Account were invested by the Ministry of Finance in the financial market (in compliance with the Atomic Act, Article 27). The total gross return on these investments in 2008 was CZK 321.5 million. A total of CZK 12.25 billion was deposited in the Nuclear Account as at 15 March 2009.

Evaluation of RAWRA's Performance

RAWRA met its responsibilities for the safe and reliable operation of Czech radioactive waste repositories during 2008 as defined in the Atomic Act. Preparations continued for the development of a deep geological repository in which high-level radioactive waste and spent nuclear fuel will be disposed of in the future. Concerning the efficient utilisation of budget funds for external subcontractors, RAWRA complied with the provisions of Act 137/2006, on public works contracts. Funds were employed efficiently and in compliance with the budget in order to fully meet the targets set out in the yearly plan of activities.

AUDITORS' REPORT

Auditors' report including auditors' opinion

We have audited the financial statements of the Radioactive Waste Repository Authority comprising the balance sheet and the profit and loss account as at 31 December 2008, and an annex to the financial statements.

Management's responsibility for the financial statements

RAWRA's management is responsible for the preparation and fair representation of the financial statements in accordance with Czech accounting regulations. This responsibility includes designing, introducing and implementing in practice a system of internal control relevant to the preparation and fair representation of financial statements that are free from material misstatement, whether due to fraud or error, selecting and employing appropriate accounting methods and making accounting estimates reasonable in the circumstances.

Auditors' responsibility

Our responsibility is to report our opinion on the financial statements audited. The audit has been conducted in accordance with the Czech Auditor Act, International Standards on Auditing and relevant implementing regulations issued by the Czech Chamber of Auditors. Under these legal regulations and in adherence to relevant ethical standards each audit is planned and performed in such a way as to provide the auditors with sufficient evidence to give reasonable assurance that the financial statements are free from apparent misstatements.

The audit includes audit procedures aimed at obtaining conclusive evidence relevant to the amounts and disclosures given in the financial statements. The audit procedures employed depend on the auditor's judgement, including his assessment of the potential risk that the financial statements might contain considerable irregularities due to fraud or mistake. Risk assessment considers the results of internal audits relevant to the preparation and presentation of the financial

statements. The aim of internal audit assessment is to recommend adequate audit procedures without expressing the auditor's view of the efficiency of the internal audit procedures.

The audit also includes an assessment of the adequacy of the accounting methods employed and estimates made by the management of the accounting entity, as well as an evaluation of the overall adequacy of the presentation of information in the financial statements.

We assume that the probative information obtained gives an adequate basis for forming our opinion.

Auditors' opinion

In our opinion, the financial statements attached herein give a true and fair view of the assets, liabilities and the overall financial situation of the accounting entity as at 31 December 2008 as well as the costs, revenue and profit/loss for 2008 in compliance with the accounting regulations effective in the Czech Republic.

Prague, 5 March 2009



Vít Dobiáš licence No. 1593



PROFIT AND LOSS ACCOUNT AS AT 31 DECEMBER 2008 (CZK 000)

I. BUDGET REVENUES

Item No) Item	Approved	Adjusted	Actual
		budget	budget	
000021	Revenues from own activities	0	0	802
000022	Penalty payments received and grant returns	0	0	7
000023	Revenues from sales of non-capital assets	0	0	150
000031	Revenues from sales of long-term assets	0	0	215
000041	Current grants received	55,300	55,300	55,300
000042	Capital grants received	44,700	44,700	44,700
	TOTAL	100,000	100,000	101,175
II. BUDO	GET EXPENSES			
372450	Wages, salaries and other remuneration	19,538	19,538	19,258
372451	Non-investment acquisitions and related expenses	38,988	38,979	32,547
372453	Non-investment transfers and certain other payments	4,774	4,783	4,777
37245	Current expenses	63,300	63,300	56,583
372461	Asset acquisitions and related expenses	44,700	44,700	44,667
37246	Capital expenses	44,700	44,700	44,667
	TOTAL	108,000	108,000	101,250

Note: Items 000041 and 000042 consist of grants from the Nuclear Account. A sum of CZK 8,000,000 was granted from the Ministry of Industry and Trade budget for RAWRA funding and is not included in RAWRA's revenues

BALANCE SHEET AS AT 31 DECEMBER 2008 (CZK 000)

ASSETS	at 1 Jan. 2008	at 31 Dec. 2008
A. Fixed assets	590,912	635,107
1. Intangible fixed assets	241,444	281,139
2. Accumulated depreciation – intangible fixed assets	0	0
3. Tangible fixed assets	349,468	353,968
4. Accumulated depreciation – tangible fixed assets	0	0
5. Long-term financial assets	0	0
B. Current assets	4,895	11,071
1. Stocks	0	0
2. Receivables	553	1,173
3. Financial assets	1,727	1,991
4. Budget management	2,615	7,906
5. Temporary asset accounts	0	0
TOTAL ASSETS	595,807	646,177
LIABILITIES		
C. Own financial resources for covering assets	591,545	634,819
1. Property funds	590,912	635,107
2. Financial funds	81	57
3. Special state organisation funds	0	0
4. Budget financial sources	0	0
5. Profit and loss account	552	-345
D. Liabilities	4,262	11,358
1. Reserves	0	0
2. Long-term payables	0	0
3. Short-term payables	4,262	11,358
4. Bank accommodations and loans	0	0

3. Short-term payables4,2624. Bank accommodations and loans05. Temporary liability accounts0TOTAL LIABILITIES595,807

0

646,177

RAWRA'S BOARD

The activities of the Radioactive Waste Repository Authority are supervised by its Board. The membership of the Board comprises representatives of the Ministry of Industry and Trade, the Ministry of Finance, the Ministry of the Environment, major radioactive waste producers, the regions in which those municipalities with radioactive waste repositories are located, as well as representatives of the public. Through its various decisions and recommendations, the Board takes an active part in RAWRA's activities during the year.

In 2008 RAWRA's Board consisted of the following members:

Mr. Luděk Janík

Chairman of the Board Head of the Radioactive Waste and Nuclear Safety Department at the Ministry of Industry and Trade

Representatives of the State:

Mr. Martin Holý, (to the 55th meeting of the Board) Director of the Geology Section at the Ministry of the Environment

Ms. Zdeňka Vojtíšková Economist at the Ministry of Finance

Representatives of the general public:

Mr. Miloš Kudera

Chairman of the Dukovany local council Represents communities in regions with existing radioactive waste repositories

Mr. Pavel Gryndler

Head of the Environment Department of the Litoměřice town council Represents communities in regions with existing radioactive waste repositories

Mr. Bronislav Grulich

Vice-Chairman of the Jáchymov town council Represents communities in regions with existing radioactive waste repositories

Mr. Jan Horník

Senator

Represents the general public and regions with planned radioactive waste repositories

Representatives of radioactive waste producers:

Mr. František Pazdera (to the 55th meeting of the Board) Director General and Chairman of the Board of the Nuclear Research Institute, Řež Represents radioactive waste producers outside the nuclear power sector

Mr. Ladislav Štěpánek

Vice-Chairman of the Board Director of the Fuel Cycle Section at ČEZ Represents radioactive waste producers in the nuclear power sector

Mr. Ivo Kouklík

Director of the Technical Development and Project Administration Section at ČEZ Represents radioactive waste producers in the nuclear power sector

Mr. Václav Urbánek Technical Director and Supervisory Board Chairman at CHEMCOMEX PRAHA Represents radioactive waste producers outside the nuclear power sector

Mr. Aleš John (from the 58th meeting of the Board) Director General and Chairman of the Board of the Nuclear Research Institute, Řež Represents radioactive waste producers outside the nuclear power sector



RAWRA'S ORGANISATIONAL CHART







From left to right:

František Koutek, Antonín Hlušička, Jolana Kubátová, Antonín Knobloch, Marcela Balášová, Lucie Ottová, František Železný, Václav Trhlík, Jiří Zahn



Upper row, from left to right:

Jiří Faltejsek, Ivana Škvorová, Josef Dufek, Ivana Kédlová, Miroslav Kučerka, Jana Petrová, Miloš Janů, Jitka Mikšová, Zdeněk Laštovička, Jozef Harčarik, Jaroslav Jelínek, Jaroslava Liehneová, Jiří Soudek, Vítězslav Duda

Lower row, from left to right:

Lenka Čerbačeská, Marcela Balášová, Markéta Dvořáková, Helena Janečková, Martina Ligaunová, Jana Šoltésová, Zdenka Čmielová, Jana Irinkovová



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