

REPORT OF
ENVIRONMENTAL
IMPACT OF
JAVYS, a. s.,

OPERATION
FOR THE
YEAR 2020



TABLE OF CONTENTS

1. Introduction	3
2. Air Protection	4
Sources of Air Pollution and Volumes of Discharged Emissions	4
Equipment Containing Fluorinated Greenhouse Gases	7
Greenhouse Gas Emissions	7
Discharges of Radioactive Substances into the Atmosphere	7
3. Water Management System	8
Drinking Water	8
Cooling Water	9
Wastewater	10
Discharges of Radioactive Substances into the Hydrosphere	13
Groundwater Monitoring and Protection	15
4. Waste Management System (Non-Active Wastes)	17
Balance of Wastes Produced off BIDSF Projects	17
Balance of Wastes Produced during BIDSF Projects	20
Balance of Municipal and Biodegradable Wastes	21
5. Serious Industrial Accidents	22
6. Environmental Impact Assessment (EIA)	23
Environmental Impact Assessment Processes	23
Activities Performed during Authorization Process	24
Post-Project Analysis	24
7. Environmental Management System	25
Abbreviations	26



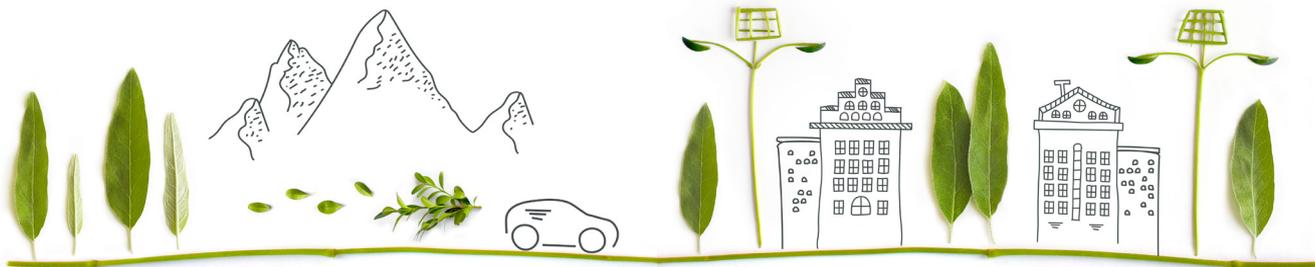
1. INTRODUCTION

The Environment Report for the Year 2020 provides comprehensive information on the air protection, water and waste management systems, on prevention of serious industrial accidents, on the management of chemicals, on environmental impact assessment (EIA) processes and on activities related to environmental protection performed within JAVYS, a. s.

By maintaining the JAVYS, a. s., certified environmental management system in accordance with standard ISO 14001:2015 Environmental Management Systems, the goal and mission are demonstrated to perform all activities with regard to environ-

mental protection. During the performance of all the activities, emphasis is placed on compliance with legal requirements identified from legal regulations of the SR and EU in individual areas of environmental protection, as well as on the obligation to comply with limits and conditions included in decisions made by state authorities and supervisory bodies for the protection of individual environment components.

The environmental protection is included in the Safety process within the framework of the integrated management system.





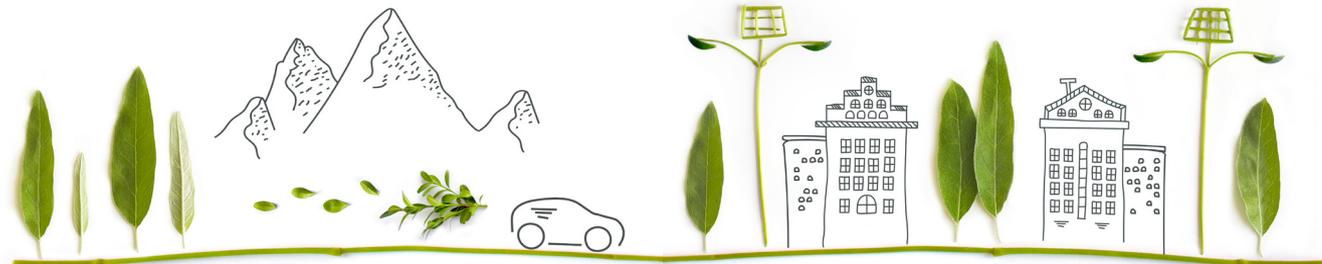
2. AIR PROTECTION

In the field of air protection, JAVYS, a. s. complies with the basic legal regulation, i.e. the Act of the National Council of the Slovak Republic No. 137/2010, Coll., on Air, as amended, and with all related acts, executive ordinances and regulations of the Government of the Slovak Republic. The operation method of air pollution sources, starting from the source permission, through the specification of the emission monitoring system, as far as the determination of the limits of pollutants discharged into the air, is governed by applicable decisions by the national authorities and supervisory bodies in relation to the air protection issued for JAVYS, a. s.

Sources of Air Pollution and Volumes of Discharged Emissions

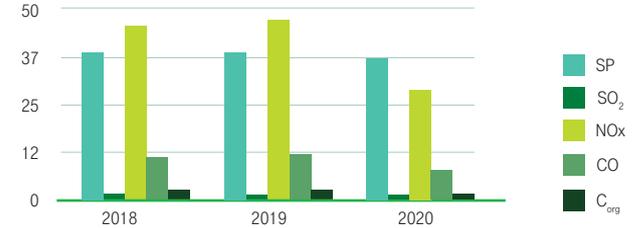
In the year 2020, JAVYS, a. s., was the operator of multiple stationary air pollution sources in the following categories - medium, small sources.

Pollution source	Category
Reserve Boiler Plant (RBP)	medium source
Diesel generator in the V1 pumping station premises	medium source
Diesel generator next to the A1 outdoor switchyard	medium source
Diesel generator in the V1 sub-station (2 pieces)	medium source
Diesel generator at the ISFS	medium source (since 14 August 2020)
	small source (by 13 August 2020)
Production of fibre concrete mixture in the V1 FCC production plant	small source



During the year 2020, the small air pollution source - Caterpillar 3306 diesel generator (the replacement power supply source for the ISFS consumption) was replaced with the new Caterpillar C13ATAAC-400 SA diesel generator having the installed rated thermal capacity of 0.84 MW whereby the air pollution source category was changed from the 'small source' to the 'medium source'.

Amounts of Emissions Discharged from All Air Pollution Sources during the Period from 2018 to 2020 (kg)



Amounts of Fuel Consumed, Numbers of Operation Hours and Amounts of Emissions Discharged from Individual Sources in the Year 2020

Pollution source	Fuel	Number of operation hours	Amounts of pollutants (kg)				
Medium air pollution sources							
	Natural gas (thous. Nm ³)	hours/year	SP	SO ₂	NO _x	CO	C _{org}
RBP	6.592	6.637	0.501	0.060	10.970	3.700	0.470
	Diesel fuel (t)	hours/year	SP	SO ₂	NO _x	CO	C _{org}
DG Caterpillar Olympian	0.411	19	0.583	0.008	2.054	0.329	0.029
DG Martin Power MP 1700	2.016	10	2.863	0.040	10.08	1.613	0.222
DG1 Martin Power MP 400	0.092	2	0.130	0.002	0.458	0.735	0.01
DG2 Martin Power MP 400	0.092	2	0.130	0.002	0.458	0.735	0.01
DG Caterpillar C13ATAAC400-SA (since 14 Aug. 2020)	0.672	10	0.955	0.014	3.360	0.538	0.074
Small air pollution sources							
FCM Production	-	-	31.300	-	-	-	-
DG Caterpillar 3306 (by 13 August 2020)	0.546	9	0.775	0.010	2.730	0.436	0.060
Total of pollutants from all APS (kg)			37.237	0.136	30.110	8.086	0.875

Amounts of Emissions Discharged from the BRWTC Incineration Plant for the Period from 2017 to 2020

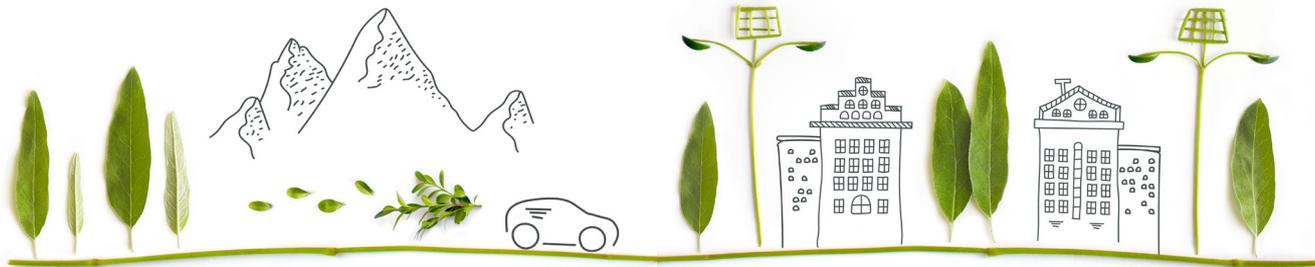
Pollutant (kg)	2017	2018	2019	2020
HCl	0.870	0.450	9.108	6.210
HF	4.260	6.660	1.207	1.240
Hg+Tl+Cd	0.248	0.233	0.217	0.218
As+Ni+Cr+Co	1.301	1.332	1.238	1.249
Pb+Cu+Mn	0.929	0.832	0.773	0.780
SO ₂	38.000	91.960	60.500	39.700
NOx	681.710	666.280	676.300	931.000
CO	71.030	86.400	114.300	56.700
SP	1.620	1.590	3.600	0.050
C _{org}	8.670	6.260	8.500	1.370
Operation hours/year	7,017	6,697	7,046	7,160

The BRWTC incineration plant operation does not fall under the Act on Air, it is not categorized as a source of air pollution. The state supervision over the incineration plant is provided by the Nuclear Regulatory Authority of the Slovak Republic.

Air Pollution Charges (NEIS)

Within the meaning of Act No. 137/2010, Coll., on Air, and within the meaning of Act No. 401/1998, Coll., on Air Pollution Charges, JAVYS, a. s., is obliged to report yearly data on stationary sources, amounts of pollutants discharged into the air for the preceding year, keeping to emission limits and the yearly charge calculation for all medium air pollution sources. The data is sent to the relevant District Environment Office (in compliance with the land register territory where the source is situated) and, subsequently, to the National Emission Information System (NEIS).

With regard to negligible amounts of pollutants produced (calculated in compliance with approved calculation procedures) in the year 2020, JAVYS, a. s., was not obliged to pay any charge for the emissions discharged from the operation of its medium air pollution sources.



Equipment Containing Fluorinated Greenhouse Gases

Within the meaning of Act No. 286/2009, Coll., on Fluorinated Greenhouse Gases and the Regulation of the European Parliament and the Council (EC) No. 517/2014, on Fluorinated Greenhouse Gases, JAVYS, a. s., is the operator of multiple equipment containing fluorinated greenhouse gases (F gases). The gases are mainly found within air conditioning units, current and voltage transformers, switchboards and stationary fire suppression equipment. Regular prescribed inspections for releases of F gases are performed on all the equipment containing F gases by asset management departments of the equipment by means of professionally competent persons. Within the meaning of Act, JAVYS, a. s., sent the report of fluorinated greenhouse gases for the year 2020 to the relevant District Environment Offices for equipment containing 5 and more equivalent tonnes of CO₂ within the time period specified by the Act.

Greenhouse Gas Emissions

Within the meaning of Act No. 414/2012 Coll., on Emission Allowances Trading, JAVYS a. s., is a mandatory trading scheme participant. In the year 2020, 25 t of greenhouse gases (CO₂) were discharged into the atmosphere from the operation of the Reserve Boiler Plant and diesel generators.

As the air pollution sources that are stand-by (emergency) sources were not in the steady operation in the year 2020, the amount of CO₂ emissions remarkably decreased, compared to the year 2019.

In compliance with requirements specified by Act No. 414/2012, Coll., on Emission Allowances Trading, a report was prepared on the level of activities of parts of equipment operation and a report on greenhouse gas emissions from the operation for the year 2020. Both the reports were verified by the accredited verifier within the meaning of the Act (ASTRAIA Certification, s. r. o.). The report on emissions along with the report on the verification was sent to the District Office in Trnava and to the Ministry of Environment of the Slovak Republic by means of the electronic emissions system ETRS.

Discharges of Radioactive Substances into the Atmosphere

Fractions of percentage of the permitted guiding limits for gaseous discharges are only discharged into the surrounding environment from JAVYS, a. s., nuclear facilities, following multiple surveillance measurements.

The guiding limits for radioactive discharges into the atmosphere were specified by decisions issued by the Public Health Authority of the Slovak Republic and they are approved by the Nuclear Regulatory Authority of the Slovak Republic.

Gaseous discharges of radioactive aerosols (β , γ) for the year 2020

Nuclear facility	Activity in dischar.	Annual guiding	% of guiding limit
Aerosols VS 46A (MPB)	1.359×10^6 Bq	6.58×10^8 Bq	0.21
Aerosols VS 46B (BL and OB)	8.400×10^4 Bq	1.41×10^8 Bq	0.06
Aer. VS 808 (BRWTC and OB)	1.570×10^5 Bq	1.41×10^8 Bq	0.11
Aerosols VS 840 (ISFS)*	1.860×10^5 Bq	3.00×10^8 Bq	0.06
Aerosols V1 NPP	1.145×10^8 Bq	8.00×10^{10} Bq	0.14
Aerosols from FP LRAW	1.260×10^4 Bq	8.00×10^7 Bq	0.16

* A common limit of 3×10^8 Bq is specified for ISFS for all radionuclides, not only for (β , γ)

No radioactive substances were discharged into the atmosphere from the NRAWR premises, with regard to the nature of the repository.

In the year 2020, the discharges from JAVYS, a. s., nuclear facilities into the atmosphere were well below the authorized guiding limits specified by the Public Health Authority of the Slovak Republic.

3. WATER MANAGEMENT SYSTEM

As for the field of water protection, JAVYS, a. s., complies with the basic legal regulation – the Act of the National Council of the Slovak Republic No. 364/2004, Col., the “Water Act”, as well as with all directly and indirectly related acts and executive ordinances and regulations.

The values of permitted amounts of discharged wastewaters, the concentration and balance limits of pollutants in the wastewaters, places and methods of the wastewater discharges, etc., are determined by applicable decisions of state authorities and supervisory bodies in the field of water protection issued for JAVYS, a. s.

Drinking Water

Drinking water is supplied to the Jaslovské Bohunice site from the TAVOS, a. s., distribution line, based on a valid drinking water supply contract. The Mochovce site is connected to the SE, a. s., EMO Plant (SE-EMO), drinking water distribution line. The drinking water supply to the administrative building in Bratislava is provided from the public water mains of Bratislavská vodárenská spoločnosť, a. s.

Amounts of Drinking Water Consumed during the Period from 2017 to 2020

Site	Consumption (m ³)			
	2017	2018	2019	2020
Jaslovské Bohunice site	40,218	51,157	45,408	48,602
NRAWR	826	1,160	434	397
FP LRAW	295	306	298	283
FCC production plant Trnava	177	*	*	*
Administrative building in Bratislava	1,060	1,519	1,150	1,180
Total	42,576	54,142	47,290	50,462

* In the 2nd half of the year 2017, the plant was moved to the Jaslovské Bohunice site.

In the year 2020, the total drinking water consumption increased by 3,172 m³, compared to the previous year, which represents an increase by 6.7 %. The increase in the drinking water consumption registered on the Jaslovské Bohunice site was caused by an increased number of contractor staff members due to the decommissioning of the A1 and V1 NPPs.

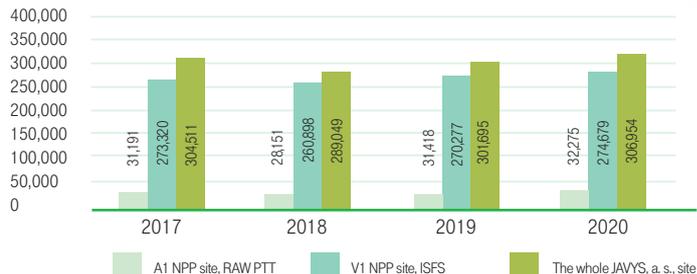
The quality of drinking water was controlled in JAVYS, a. s., within the meaning of Ordinance of the Ministry of Health of the Slovak Republic No. 247/2017, Coll., laying down Details of Drinking Water Quality, Drinking Water Quality Control, Monitoring Program and Risk Management in relation to the Drinking Water Supply, and within the meaning of Decree of the Ministry of Health of the Slovak Republic No. 100/2018, Coll., on Reduction of Population Exposure from Drinking Water, Natural Mineral Water and Spring Water. All tested samples complied with the limit values specified by the Ordinances of the Ministry of Health of the Slovak Republic for the evaluated sample indicators.

Cooling Water

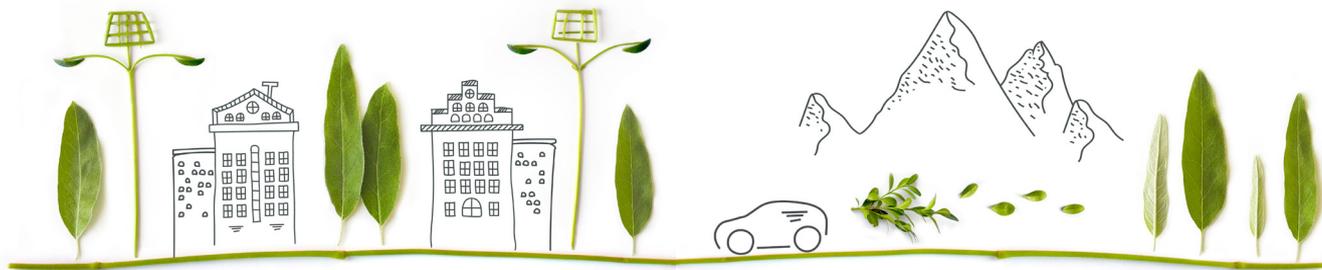
Surface water taken from the Slňava water reservoir is used as cooling water on the Jaslovské Bohunice site. SE-EBO is its supplier. The surface water is used for the cooling of the safety and emergency systems at V1 NPP, for the cooling of facilities providing the radioactive waste and spent nuclear fuel processing and storage (ISFS).

The amounts of cooling water consumed show a steady trend with regard to both the technology and methods of decommissioning of individual operational systems and civil structures situated on the A1 and V1 NPPs sites.

Amounts of Consumed Cooling – Váh River – Water during the Period from 2017 to 2020 (m³)



The FP LRAW (the bituminization lines and the thickening evaporator) technological facilities are connected to the supply of the non-essential service water system from the SE-EMO distribution system, i.e. to the circulation cooling water system. The cooling water consumption amounted to 3,672 m³ in the year 2020.



Wastewater

Jaslovské Bohunice Site

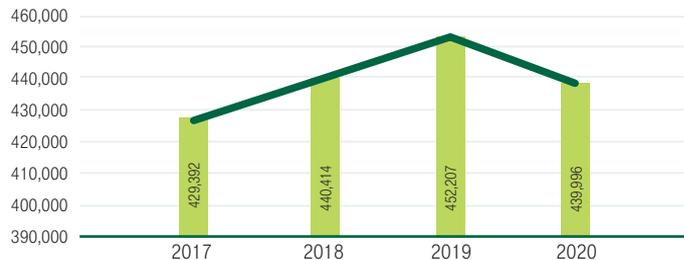
Wastewater is drained from the JAVYS, a. s., site in Jaslovské Bohunice by means of separated sewage systems to the Váh (technological water) and Dudváh (surface drainage water) river recipients.

Balance of Discharged Wastewater

Wastewater from the Jaslovské Bohunice site is discharged via the pipe drainage collector SOCOMAN and the open canal Manivier within the meaning of applicable decision No. OU-TT-OSŽP2-2013/00026/GI issued by the District Office in Tmava. Within the meaning of the applicable decision, JAVYS, a. s., is not obliged to measure amounts and quality of rainwater discharged from JAVYS, a. s., into the Dudváh river recipient.

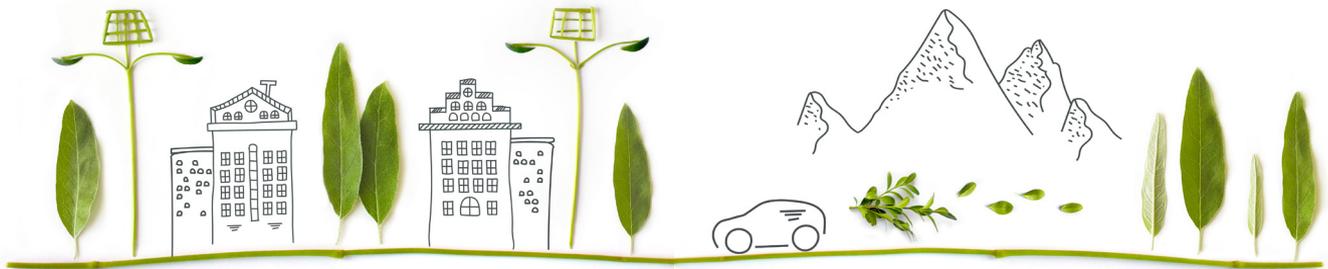
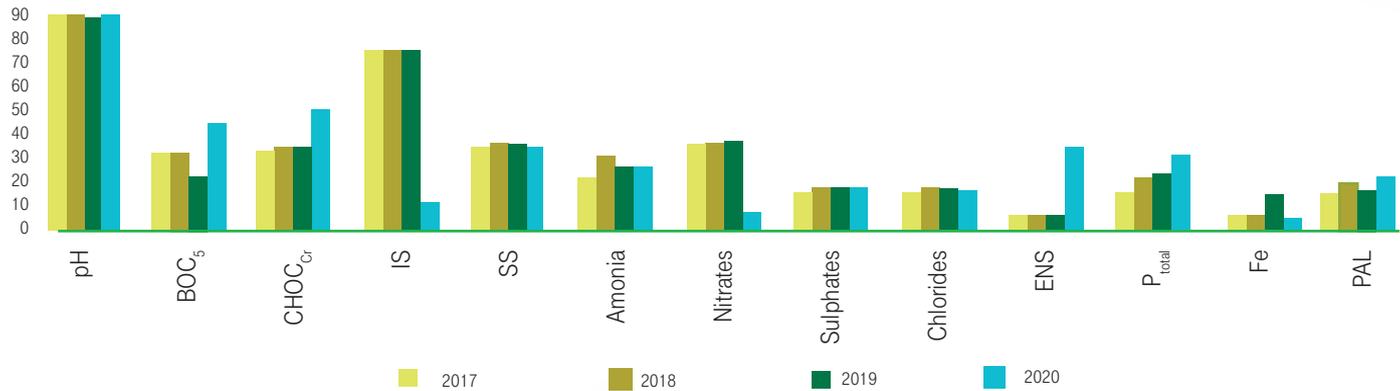
During the monitored time period, limit values of pollutant indicators in wastewater discharged into the Váh river recipient were not exceeded.

Amounts of Wastewater Discharged into the Váh River Recipient during the Period from 2017 to 2020 (m³)





Percentage Use of Limits for Individual Pollutants in Discharged Wastewaters during the Period from 2017 to 2020 (%)



Average Chemical Pollution Concentration Discharged into the Váh River Recipient

Chemical pollution indicator	Average concentration of discharged pollution 2020	Maximum permitted concentration (decision No. OU-TT-OSŽP2-2013/00026/GI)
	mg/l	mg/l
Acidity, alkalinity – pH	8.063	9.00
Biochem. oxygen consumption – BOC ₅	3.618	8.00
Chem. oxygen consumption – CHOC _{Cr}	15.681	30,00
Insoluble substances – IS	2.181	20.00
Soluble substances – SS	347.667	1,000.00
Ammonia – N-NH ₄ ⁺	1.031	4.00
Nitrates – NO ₃ ⁻	3.719	50.00
Sulphates – SO ₄ ²⁻	24.722	150.00
Chlorides – Cl	15.591	100.00
Extracted non-polar substances – ENS	0.110	0.35
Total phosphates – P _{total}	0.619	2.00
Iron – Fe	0.060	2.00
Detergents – PAL	0.108	0.50

Mochovce NRAWR Site

A rainwater sewage system is installed on the NRAWR site that is emptied into the creek Telinsky potok via rainwater tanks.

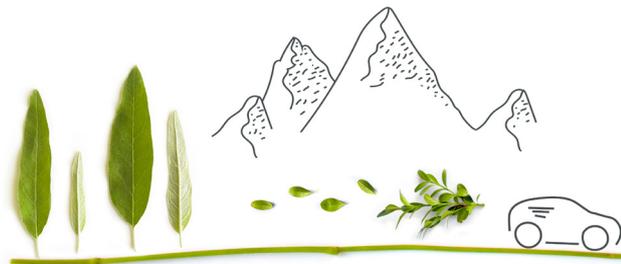
The Chief Public Health Officer of the Slovak Republic issued a permission to JAVYS, a. s., included in his decision No. OOPŽ/6573/2011 specifying also the guiding values of activities in discharged water from the surface drainage from the Mochovce NRAWR. Decision No. 2015/040759 – the permission to discharge water from the surface drainage into the surface flow of the creek Telinsky potok, was issued by the District Office in Nitra.

In the year 2020, 2,724 m³ of water were discharged from the surface drainage into the creek Telinsky potok. Sanitary water amounting to 195 m³ was accumulated in a waterproof cess-pool on the NRAWR site and removed to the wastewater treatment plant for purification.

Mochovce FP LRAW Site

Sanitary water from the FP LRAW is drained into the SE-EMO sewage system, it is taken from there into the wastewater treatment plant and, following the purification, it is discharged into the environment along with SE-EMO waters.

The rainwater is drained into the SE-EMO rainwater sewage system along with rainfall waters from other SE-EMO civil structures. The sanitary water and rainwater drainage is provided by Slovenské elektrárne, a. s.



Discharges of Radioactive Substances into the Hydrosphere

Fractures of percentage of the permitted limits for liquid discharges are only discharged from the JAVYS, a. s., nuclear facilities into the surrounding environment after multiple surveillance measurements.

Guiding limits for radioactive discharges into the surface water from JAVYS, a. s., nuclear facilities were set up by decisions of the Public Health Authority of the Slovak Republic and they are approved by the Nuclear Regulatory Authority of the Slovak Republic.

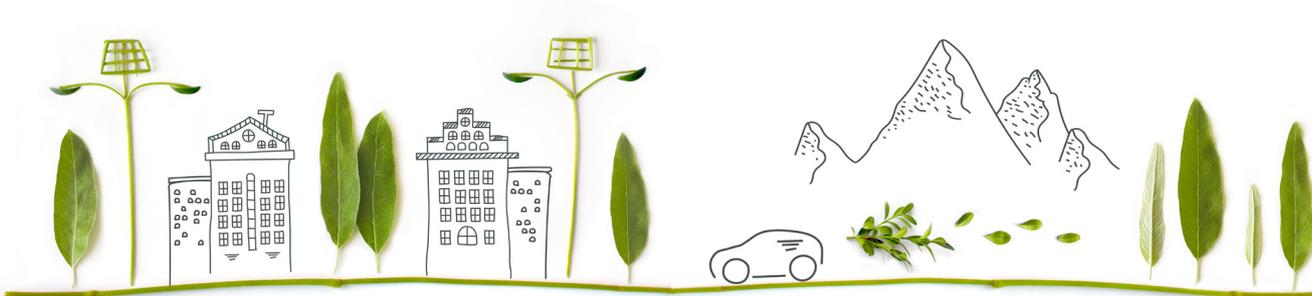
The surveillance of discharged activities contained in wastewater is carried out by means of measuring volumetric activities of tritium, corrosion and fission products, and of water amounts stored in collection tanks of RAW PTT, A1NPP, ISFS and V1 NPP, while water discharges are also checked by means of continuous monitoring in measurement locations. Low-level waters also include the water discharged due to the standard operation of the groundwater remediation pumping system from well N-3 (SO 106) for which the permission was issued by the District Office in Trnava within the meaning of Act No. 364/2004, Coll., on Waters.

Low-level Water Discharges from the Jaslovské Bohunice Site (including the Water Coming from the Remediation Pumping from the RAW PTT and A1 NPP Sites) into the Váh River Recipient

2020	Activities of radionuclides in wastewaters of the Váh river recipient							
	V1 NPP site, ISFS				A1 NPP site, RAW PTT			
	6,414 m ³				187,624 m ³			
Volume discharged water	CFP (MBq)	Tritium (GBq)	% of the guiding limit CFP*	% of the guiding limit ³ H*	CFP (MBq)	Tritium (GBq)	% of the guiding limit CFP**	% of the guiding limit ³ H**
Total	19.431	10.101	0.149	0.505	17.748	119.066	0.148	1.191

* guiding limit for CFP: 13,000 MBq; guiding limit for tritium: 2,000 GBq

** guiding limit for CFP: 12,000 MBq; guiding limit for tritium: 10,000 GBq



The Dudváh River Recipient - Low-level Water Discharges

No low-level water was discharged into the Dudváh river recipient in 2020.

Active Discharges into the Hydrosphere from NRAWR and FP LRAW

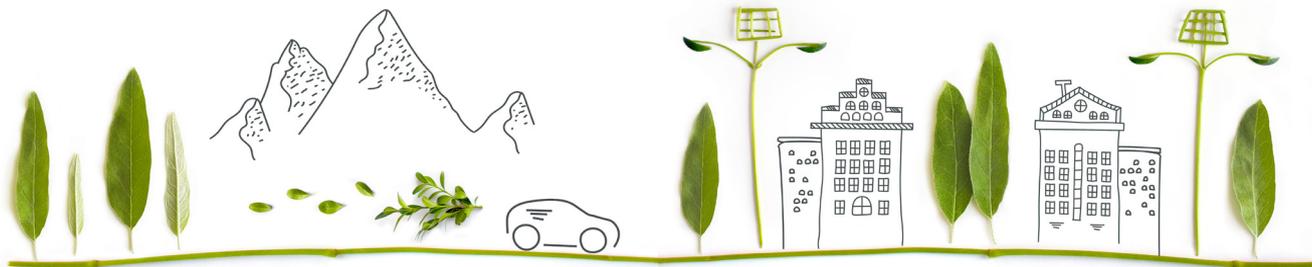
Surface drainage water is only discharged from NRAWR into the creek Telinský potok. The volume of 2,724 m³ of water containing the total activity of 3.62 × 10⁵ Bq was discharged in the year 2020.

Limits of volumetric activities of radionuclides in discharged water specified by the decision of the Chief Public Health Officer were not exceeded for any of the indicators during the monitored period.

Data on Quality of Rainfall Wastewater Discharged from NRAWR

Radionuclide	Annual guiding limit (Bq/year)	Activity of discharges (Bq)	% of guiding limit
³ H	1.88 × 10 ¹⁰	6.82 × 10 ⁶	0.036
¹³⁷ Cs	2.28 × 10 ⁷	4.81 × 10 ⁴	0.211
⁶⁰ Co	2.24 × 10 ⁷	2.40 × 10 ⁴	0.107
⁹⁰ Sr	2.44 × 10 ⁸	2.81 × 10 ⁵	0.115
²³⁹⁺²⁴⁰ Pu	5.56 × 10 ⁵	0.90 × 10 ⁴	1.607

Two kinds of secondary active liquid waste are produced in the FP LRAW facility. These active media (wastewater, waste vapours - bride condensate) are not discharged into the environment (active discharges). They are accumulated in tanks and pumped from there into the SE-EMO system (8.13 m³ in the year 2020) for further processing, or they are returned to the FP LRAW operation, respectively, and treated as LRAW.



Data on Quality of Active Secondary Wastewater Discharged from FP LRAW into SE-EMO

Radionuclide	Sum of activities	Annual limit Bq	% of limit
Tritium (Bq)	1.10×10^7	3.0×10^{11}	0.0040
Corrosion and fission products (Bq)	1.13×10^4	3.9×10^9	0.0003

Groundwater Monitoring and Protection

Jaslovské Bohunice Site

The monitoring and protection of groundwater and soil waters on the Jaslovské Bohunice site and in its surroundings has been carried out since 1997 in accordance with the approved monitoring program. The radiation situation in the groundwater under RAW PTT and A1 NPP sites, monitored in the long term and regularly, is currently stabilized. The continuous remediation pumping system has been in operation on the site since 2000.

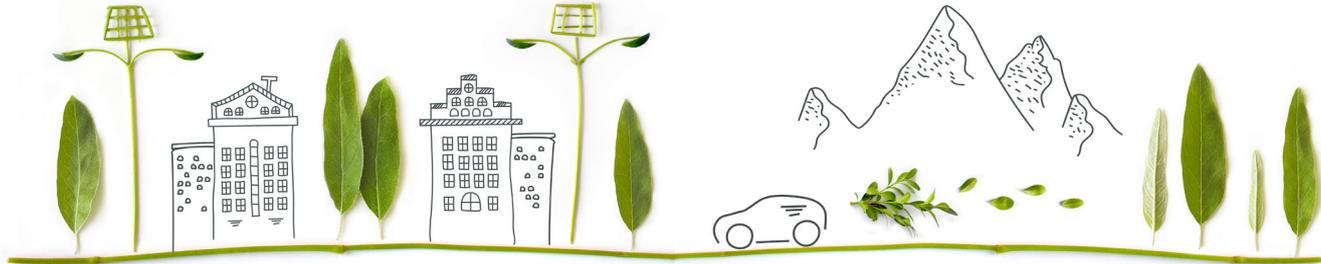
Activities are carried out under the A1 NPP decommissioning project based on which primary soil contamination sources were gradually removed and, subsequently, the same was implemented for groundwater contamination sources. The remediation pumping system operation was performed in accordance with the applicable decisions of the Ministry of Environment of the SR.

Evaluation of the Standard Operation of the Groundwater Remediation Pumping System from Well N-3 in the Year 2020

Remediation pumping 2020	CFP activity drawn away	Use of guiding limit for CFP*	Tritium activity drawn away	Use of guiding limit for ³ H*	Water volume drawn away (m ³)
	MBq	%	GBq	%	
Total	1.750	0.015	71.74	0.717	183,429

* "Use of Guiding Limit" values are specified by the decision as follows:
 - the guiding limit for CFP = 1.2×10^4 MBq,
 - the guiding limit for ³H = 1.0×10^4 GBq.

In addition to the monitoring inside the company site, the monitoring of the surroundings is performed as well. Based on the groundwater monitoring results in the surroundings of the Jaslovské Bohunice site, it is possible to observe significant improvements in the radiation situation (the decrease in the level of tritium volumetric activities as low as an insignificant level achieving the natural background level) in the surroundings of Malženice and Žilkovce municipalities.





Mochovce NRAWR Site

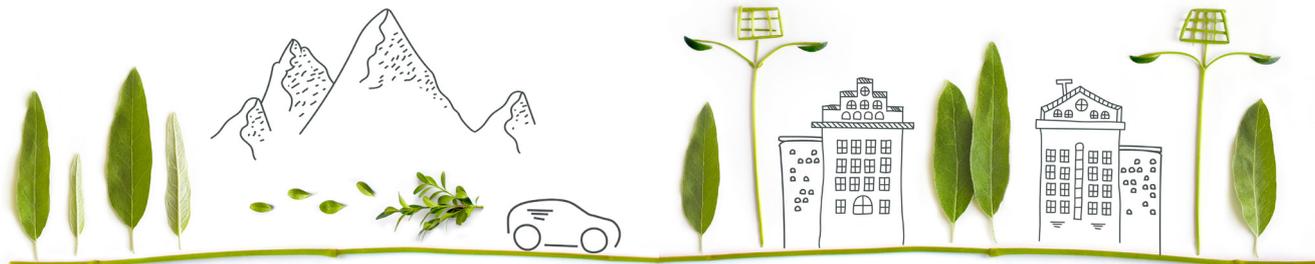
Groundwater samples were taken from monitoring wells on the NRAWR site and in its near surroundings, in compliance with the applicable time schedule for the year 2020 and, subsequently, their chemical and radiochemical analyses were performed.

In addition to the groundwater monitoring, drainage water is also monitored at the NRAWR facility where, in the year 2020, volumetric activities of individual radionuclides were below the limit specified by the Chief Health Officer of the Slovak Republic. Drainage waters are discharged via rainwater tanks, both their amounts and analyses are included in sections dedicated to discharged waters.

Results of Chemical and Radiochemical Analyses of Waters in the Year 2020

Measured Quantity	Activity Limit (Bq/l)
^3H	< 5
Total beta activity	< 1
^{137}Cs	< 1.21
^{60}Co	< 0.83
^{90}Sr	< 0.15
^{239}Pu	< 0.01

Results of radiochemical measurements are on the background level and during operation no negative impacts on the environment occurred on NRAWR site and in its surroundings.



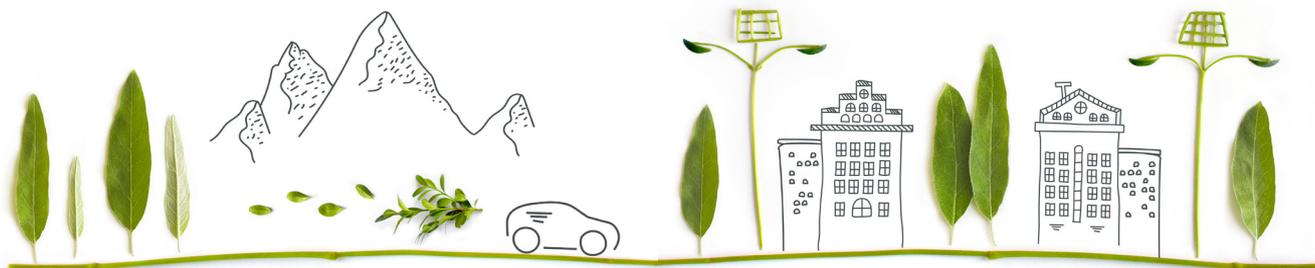
4. WASTE MANAGEMENT SYSTEM (NON-ACTIVE WASTES)

In the year 2020, JAVYS, a. s., complied with the basic legal regulation in the waste management system field (non-active wastes) – the Act of the National Council of the Slovak Republic No. 79/2015, Coll., on Wastes, as amended, and with all related acts and executive ordinances, as amended.

The waste management is provided within JAVYS, a. s., by means of collection, sorting and accumulation in premises reserved for those purposes – the Waste Collection Yard. For the purposes of collecting hazardous wastes within the waste producer premises prior to their further management, JAVYS, a. s., was granted the consent by the District Office in Trnava No. OU-TT-OSZP3-2016/018193/ŠSOH/Du.

Balance of Wastes Produced off BIDSF Projects

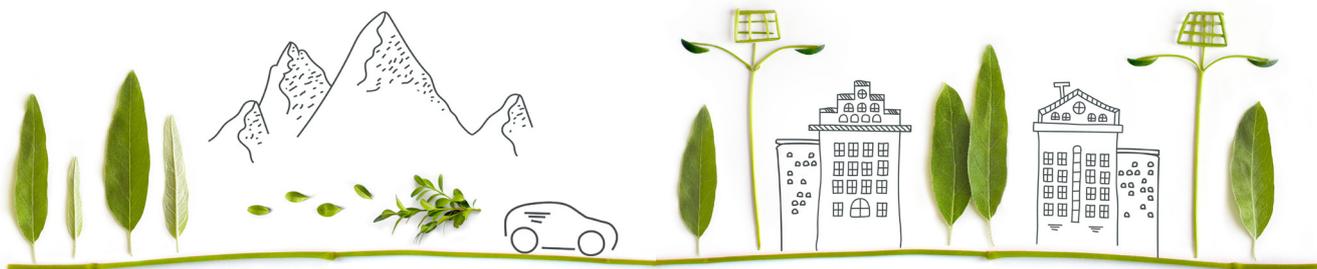
The disposal and recovery of wastes produced during activities that are not implemented by means of BIDSF projects come within the scope of JAVYS, a. s., competence. In case of contractor activities, the disposal and recovery of such wastes are ensured, based on a contract with the relevant contractor.





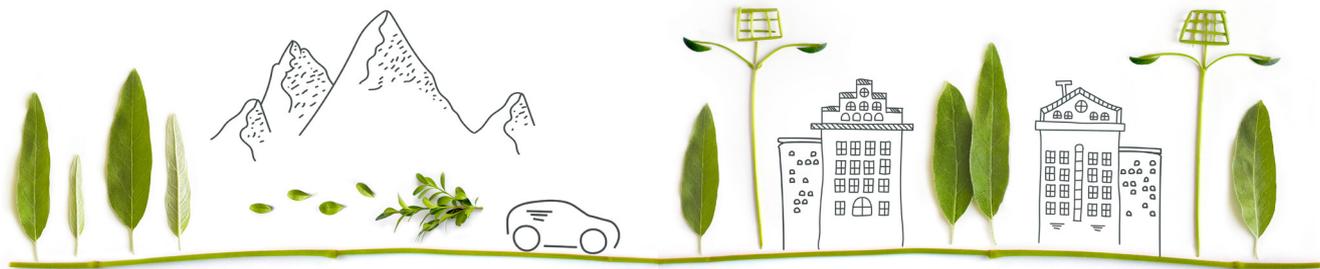
Amounts and Kinds of Other Wastes Produced in JAVYS, a. s., off BIDSF Projects on the Jaslovské Bohunice Site in the Year 2020

Catalogue number	Waste kind	Name of other waste	Amount (t)	Recovered (t)	Disposed (t)
150101	0	Paper and paperboard packagin	5.250	✓	
150102	0	Plastic packaging - PET bottles	0.820	✓	
160214	0	Discarded equipment other than those indicated under 160209 to 160213	17.220	✓	
170201	0	Wood	6.440	✓	
170604	0	Insulation materials other than those indicated under 170601-03	25.180		✓
190809	0	Fat and oil blends from oil separators from water containing edible oils and fats	13.800	✓	
Total amount			68.710	43.530	25.180
Total amount (%)			100 %	63.35 %	36.65 %



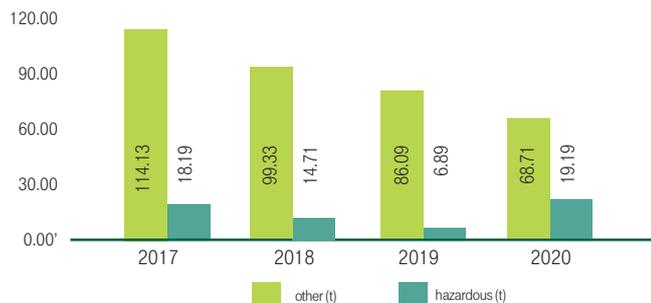
Amounts and Kinds of Hazardous Waste Produced in JAVYS, a. s., off BIDSF Projects on the Jaslovské Bohunice Site in the Year 2020

Catalogue number	Waste kind	Name of hazardous waste	Amount (t)	Recovered (t)	Disposed (t)
090104	H	Fixing agent solutions	0.820		✓
130208	H	Other motor, transmission lubrication oils	1.020	✓	
191206	H	Wood containing hazardous substances	6.620	✓	
150110	H	Packaging cont.remains of hazardous substances or cont. by hazardous substances	0.585	✓	
150202	H	Absorb., filter. mater. inc. oil filters, cleaning cloths contam. by hazardous substances	0.080	✓	
160213	H	Discarded equipt. cont. dangerous parts other than those indic. under 160209- 160212	0.840	✓	
160506	H	Laborat. chemicals consis.of hazardous subst., containing hazardous substances	0.020		✓
160601	H	Lead-acid batteries	1.360	✓	
060106	H	Other acids	6.940		✓
080317	H	Waste toner for printers containing hazardous substances	0.220		✓
060404	H	Waste containing lead	0.009		✓
200121	H	Fluorescent lamps and other waste containing mercury	0.520	✓	
130802	H	Other emulsions	0.160	✓	
Total amount			19.194	11.185	8.009
Total amount (%)			100 %	58.27 %	41.73 %



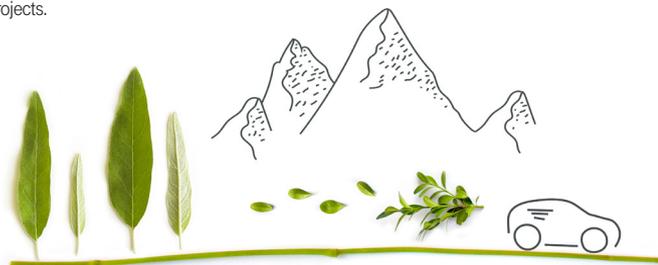


Production of Other and Hazardous Wastes on the J. Bohunice Site off BIDSF Projects during the Years 2017 to 2020 (t)



Balance of Wastes Produced during BIDSF Projects

Wastes were produced during the V1 NPP decommissioning, Stage 2, implementation that were recovered and disposed of by contractors and sub-contractors of suppliers of individual projects.



Amounts and Kinds of Other and Hazardous Wastes Produced in JAVYS, a. s., during BIDSF Projects in the Year 2020

Catalogue number	Waste kind	Name of other waste	Amount (t)	Recovered (t)	Disposed (t)
150106	O	Mixed packages – BIDSF D4.1 Project	0.120	✓	
170203	O	Plastics – BIDSF A5-A3 project	5.680		✓
170203	O	Plastics – BIDSF D1.2 project	7.560		✓
Total amount (t)			13.360	0.120	13.240
Total amount (%)			100 %	0.90 %	99.10 %

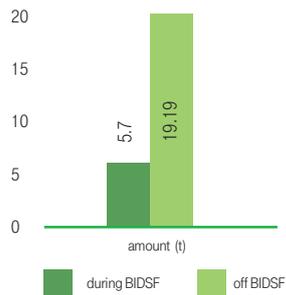
Catalogue number	Waste kind	Name of other waste	Amount (t)	Recovered (t)	Disposed (t)
170410	H	Cabl. cont. oil, coal tar and oth. danger. subst. – BIDSF D1.2 project	3.860	✓	
170605	H	Construction mat. contain. asbestos – BIDSF D4.2 project	0.960		✓
130208	H	Other motor, transmis. and lubrication oils – BIDSF D4-4B project	0.880	✓	
Total amount (t)			5.700	4.740	0.960
Total amount (%)			100 %	83.16 %	16.84 %

Comparison of the amount of other and hazardous waste from the point of view BIDSF projects and own production

Comparison of Production in 2020
- Other Wastes (t)



Comparison of Production in 2020
- Hazardous Wastes (t)



Balance of Municipal and Biodegradable Wastes

Amounts of Municipal and Biodegradable Wastes Produced in JAVYS, a. s., on the Jaslovské Bohunice and Mochovce Sites in the Year 2020

Catalogue number	Waste kind	Waste name	Amount (t)	Recovered (t)	Disposed (t)
200301	O	Mixed municipal wasted - J. Bohunice	39.94		✓
200301	O	Mixed municipal wasted - Mochovce	3.03		✓
200201	O	Biodegradable wastes	9.20	✓	
Total amount			52.17	9.20	42.97
Total amount (%)			100%	17.64%	82.36%





5. SERIOUS INDUSTRIAL ACCIDENTS

JAVYS, a. s., complies with the basic legal regulation in the area of prevention of serious industrial accidents – the Act of the National Council of the Slovak Republic No. 128/2015, Coll., on Prevention of Serious Industrial Accidents and on Amendments of Certain Acts, as well as with all regulations related directly or indirectly to the Act.

In spite of the fact that JAVYS, a. s., is entered neither in Category A, nor in Category B within the meaning of the Act, the company is obliged to continue the regular monitoring of quantities, fire characteristics and kinds of hazardous substances present

in its premises. The “Management of Chemical Substances” (MCHS) application is used to monitor the management of hazardous chemical substances. The application includes a code list of all chemical substances and mixtures purchased and used within the company and of those brought into JAVYS, a. s., premises by contractors and tenants as well. The chemical substances are categorized according to the Chemical Act, the Act on Waters and the Act on Prevention of Serious Industrial Accidents. “Safety Data Sheets” are available to staff members in this application for each chemical.





6. ENVIRONMENTAL IMPACT ASSESSMENT

Requirements specified by the Act of the National Council of the Slovak Republic No. 24/2006, Coll., on Environmental Impact Assessment and on Amendments to Certain Acts, as amended, are applied in the field of environmental impact assessment. The requirements are implemented into the internal guideline BZ/OŽ/SM-04 Environmental Impact Assessment (EIA).

Environmental Impact Assessment Processes

Examination proceedings

In the year 2020, examination proceedings were performed for the following change in the proposed activity: **Change in use of 760-II.3,4,5:V1 civil structure – storage premises for metallic superficially contaminated materials within the ‘Reconstruction and Relocation of Technological Equipment to 760-II.3,4,5:V1 Civil Structure’ project.**

Compulsory Assessment

In the year 2020, the compulsory assessment process continued in compliance with the Act No. 24/2006, Coll., for the proposed activity **‘Optimization of Processing Capacities of the JAVYS, a. s., Radioactive Waste Processing and Treatment Technologies on the Jaslovské Bohunice Site’** by the submission of a professional assessment to the Ministry of Environment of the Slovak Republic (developed by the professionally competent person appointed by the ME SR) that serves as a background document for the issue of the Final Position by the ME SR, and by repeated notifications to the ME SR of background documents for the decision before the issue of the Final Position. The process of environmental impact assessment for the proposed activity has not been completed in the year 2020.



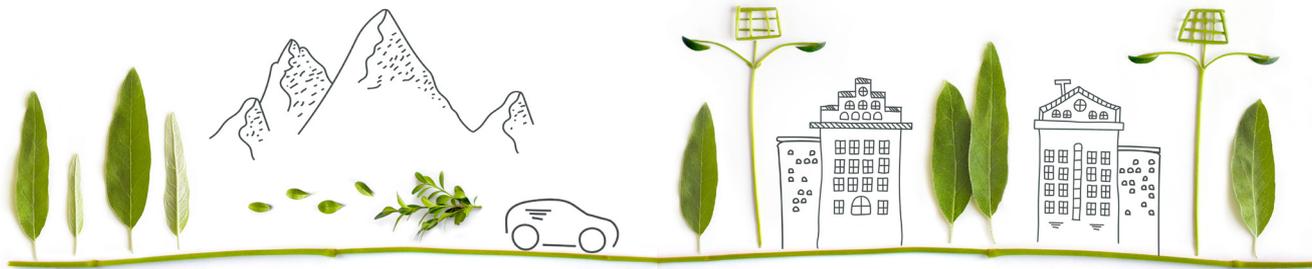


Activities Performed during the Authorisation Proceedings of Assessed Activities

The implementation and operation of activities that were assessed in compliance with the Act on Environmental Impact Assessment is only possible on condition that compliance is demonstrated between the implementation of the activities and the Final Position resulting from the assessment process or the decision issued during the examination proceedings. The compliance is demonstrated by way of preparing a written evaluation of conditions specified in the Final Position by the Ministry of Environment of the Slovak Republic, or of conditions specified in the decision issued during the examination proceedings, respectively, and by attaching it to the application for permission of the activity. During the year 2020, a written evaluation was prepared in relation to the meeting of conditions specified in final positions to permission proceedings to D4.1 and D4.2 BIDSF projects and to the 'Completion of Construction of the Interim Spent Fuel Storage Capacities on the Jaslovské Bohunice Site' investment project. In all of its Final Positions, the ME SR confirmed the compliance between the authorization proceedings and Act No. 24/2006, Coll., and decisions issued under the Act.

Post-Project Analysis

During the first half of the year 2020, a post-project analysis was developed for the year 2019 for all reviewed activities performed by JAVYS, a. s. Results of the post-project analysis and of evaluations of meeting the conditions specified by the ME SR in its Final Positions to individual permissions show that JAVYS, a. s., performs all the reviewed activities in compliance with the Act on Environmental Impact Assessment and with decisions issued in compliance with the Act.





7. ENVIRONMENTAL MANAGEMENT SYSTEM

By maintaining the certified environmental management system in accordance with standard ISO 14001:2015 "Environmental Management Systems", JAVYS, a. s., performed all its activities with regard to environmental protection in the year 2020.

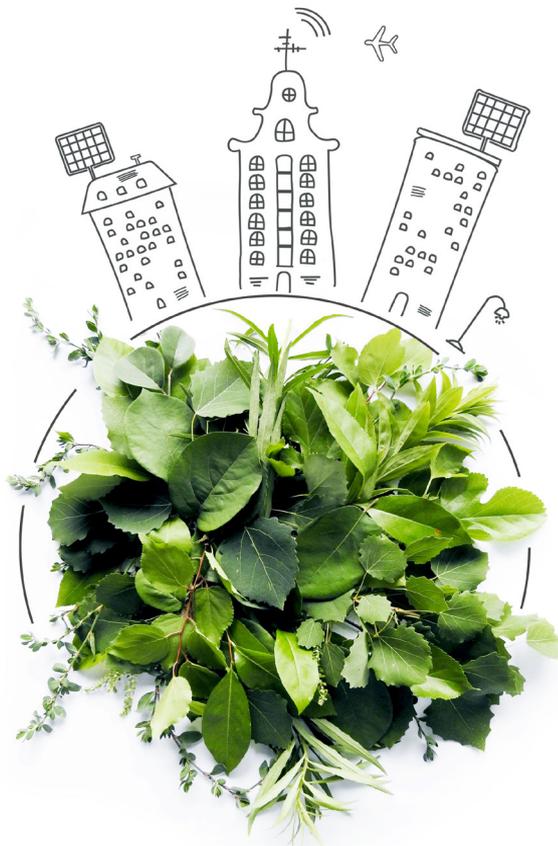
Both the functionality and implementation of that system were verified by the independent certification company Det Norske Veritas during the periodical IMS audit that was held from 2 to 3 November 2020 and from 9 to 11 November 2020 and, subsequently, Det Norske Veritas confirmed the validity

of the internationally accepted certificate for JAVYS, a. s. Within the process approach, the environmental protection is regularly inspected and verified by means of internal IMS audits during which the application of environmental management system requirements is verified as well. Minor findings resulted from the audits that were removed within specified time periods and within the meaning of recommendations defined in IMS audit reports. No non-conformances were identified during the performance of those audits.

Abbreviations

APS	Air pollution source
As	Arsenic
Bq	Bequerel
BIDSF	Bohunice International Decommissioning Support Fund - V1 NPP
BL	Bituminization line
BRWTC	Bohunice Radioactive Waste Treatment Centre
C _{org.}	Organic carbon
Cd	Cadmium
CFP	Corrosion and fission products
CO	Carbon monoxide
CO ₂	Carbon dioxide
Co	Cobalt
Cr	Chrome
Cs	Caesium
CS	Civil structure
Cu	Copper
DG	Diesel generator
E	Environment
EIA	Environmental impact assessment
EU	European Union
FCC	Fibre concrete container
FCM	Fibre concrete mixture
Fe	Iron (Ferrum)
FP LRAW	Final Processing of Liquid Radioactive Waste
GBq	Gigabequerel
³ H	Tritium
Hg	Mercury
HCl	Hydrogen chloride
HF	Hydrogen fluoride
HP	Hazardous parts
HS	Hazardous substance
IRAW	Institutional radioactive waste

ISFS	Interim Spent Fuel Storage
JAVYS, a. s.	Jadrová a vyradovacia spoločnosť, a joint stock company
MBq	Megabequerel
ME SR	Ministry of Environment of the Slovak Republic
Mn	Manganese
MPD	Main Production Building
MW	Megawatt
MZ SR	Ministry of Health of the Slovak Republic
MŽP SR	Ministry of Environment of the Slovak Republic
Ni	Nickel
NOx	Oxides of nitrogen
NRA SR	Nuclear Regulatory Authority of the Slovak Republic
NRAWR	National Radioactive Waste Repository
OB	Outdoor buildings
OS	Organic solvents
Pb	Lead
PHA SR	Public Health Authority of the Slovak Republic
Pu	Plutonium
RAW	Radioactive waste
RAW PTT	Radioactive Waste Processing and Treatment Technologies
RBP	Reserve Boiler Plant
SE-EBO	Slovenské elektrárne, a joint stock company, Bohunice Nuclear Power Plant (V2 NPP)
SE-EMO	Slovenské elektrárne, a joint stock company, Mochovce Nuclear Power Plant (EMO1,2)
SNF	Spent nuclear fuel
SO	Sulphur dioxide
SP ₂	Solid pollutants
Sr	Strontium
TAVOS, a. s.	Trnavská vodárenská spoločnosť, a. s. - Trnava Water Management Company, j. s. c.
VS	Ventilation stack



Jadrová a vyráb'ovacia spoločnosť, a. s.
Jaslovské Bohunice 360
919 30 Jaslovské Bohunice
www.javys.sk