



MINLEX - Sweden Country Report

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1. SWEDEN

1.1. Summary of findings

The Swedish mining industry is one of the largest in Europe. Sweden is nowadays the largest producer and exporter of iron ore in Europe and hosts the world's largest underground iron ore mine, in Kiruna. Sweden is among the leading European nations in the production of base and noble metals (copper, zinc, lead, gold, silver) and has a large mineral potential, especially in the northern region.

In Sweden, the right to grant access to concession minerals and permits to extract mineral deposits is reserved to the state. The "concession minerals" are legally defined and listed in the Minerals Act and comprise metallic ores, a wide range of industrial minerals, coal, oil, gaseous hydrocarbons and diamonds. The right to extract "non-concession minerals" (aggregates, dimensional stone, limestone) belongs to the landowner. If the developer does not own the land in question, the right to explore and extract must be regulated by a contract with the landowner. Accordingly, an additional mining concession is not required for "non-concession minerals".

Mineral exploration and the extraction of "concession minerals" in Sweden are governed by the Minerals Act (1991:45), as amended subsequently, which is applicable in parallel with other legislation to all exploration and extraction works, e.g. the Planning and Building Act (2010:900), Environmental Code (1998:808), Cultural Heritage Act (1988:950) and Off-Road Driving Act (1975:1313). **The Swedish Environmental Code is particularly relevant, as permits for extraction must be granted under both the Minerals Act and the Environmental Code. The primary law concerning the extraction of "non-concession minerals" is the Environmental Code** (1998:808), which is applicable in parallel with other legislation (as above). The Minerals Act do not apply to these sub-groups.

The competent authority for mining is the Mining Inspectorate, headed by the Chief Mining Inspector (a government appointee), **who issues permits for mineral exploration** (exploration permits) **and extraction (exploitation or mining concessions) for mineral deposits associated with the Minerals Act**. In the process for exploration permits, the County Administrative Board, the municipality and the Sámi Parliament (the Parliament of the Sámi indigenous peoples) are also involved in the process and are entitled to comment on the application. Regarding the extraction concession procedure, the County Administrative Board takes part in the evaluation of land use issues connected to the location of the extraction area applied for.

For extraction to commence, besides the exploitation concession, an environmental permit is required. The application for an environmental permit required under the Environmental Code is handled by the Land and Environmental Court or by any of 12 (out of 21) responsible County Administrative Boards if appropriate. In the permitting process for an environmental permit, several public entities may take part in the process, for instance, the Swedish Environmental Protection Agency, the Swedish Agency for Marine and Water Management, a County Administrative Board, and the Swedish Civil Contingencies Agency. The local municipality is responsible for permissions required under the Planning and Building Act.

Statistics show that, for 2018, the average length to get an exploration permit (from application date to final decision) was 99 days for new exploration permits and 70 days for extended exploration permits. Likewise, the decision period for mining concessions (from application date to final decision) was on average 32 months in 2018 and 36 months in

2017. **Permitting success rates are fairly high in Sweden:** during the period 2016-2018, the mining authority's rate of permitting success was 84 % for new exploration permits (85 % for extended exploration permits). The permitting time for applications on exploitation concessions varies between one year or longer. Usually an application for an exploitation concession is often over two or more calendar years. During the period 2016-2018, a further seven concession decisions, that have been appealed to the Government, have been referred back to the Mining Inspectorate for new permitting, with original application dates before 2016. This means that fair statistics on permitting success rates for exploitation concessions in that period cannot be reported.

For concession minerals, the complete process for obtaining an environmental permit according to the Environmental Code takes normally approximately two to three years depending on the size of the mining operation, where it is to be carried out and the existence of appeals, e.g. due to overlapping interests with nature conservation, reindeer herding or other competing land uses. An application starting in the Land and Environment Court will normally be processed in approximately 12 to 18 months and will include all necessary permits except building permits (if any) and permits related to cultural heritage (if any). **In some cases, it may take longer but in average the total time is less than three years**¹; two examples (not researched in detail in this study) are the application made by Nordic Iron Ore for a new mine (Fe) in Blötberget and the application made by Boliden Minerals for the extension of the mine in Garpenberg both of which were processed in 20 months. **Concerning non-concession minerals,** two examples of delays due to such overlapping interests are presented in this study, exemplified by conflicts between Natura 2000 areas and limestone quarries in Gotland, Sweden's largest island and home to traditional limestone quarries which supply the cement industry (see the Bunge-Ducker and SMA cases in this report, exemplary but rather exceptional cases with regards to permitting procedures). On 1 April 2019 the Supreme Court (HD) did not leave to appeal, so the decisions from the Land and Environment Court of Appeal stands (for Bunge-Ducker, case number: M 5431-14 and for SMA, case number: M 5375-14).

1.2. General introduction

The Swedish mining industry is one of the largest in Europe. Sweden has a history of mining and metal refining stretching back more than a thousand years and it is nowadays the largest producer and exporter of iron ore in Europe and hosts the world's largest underground iron ore mine in Kiruna. Sweden is among the leading nations in the production of base and noble metals (copper, zinc, lead, gold, silver): Sweden and Finland produce together 70% and 21% of EU's gold and silver respectively. Sweden has a large mineral potential, especially in the northern region, the most mineralized area in Europe and part of the Fennoscandian Shield, the largest exposed area of Precambrian rocks in Europe. Such region concentrates 60% of the exploration permits and 73% of the total permitted area, and it is also the area where most mines in operation are placed. The extraction of metalliferous minerals was 77,8 million tons in 2017 (+ 50 million tons of "gråberg", waste rock); while the extraction of industrial minerals reached 8,4 million tons in 2017 and of construction minerals of 95,8 million tons in 2017.

¹ Such figures are not valid for permitting of non-concession minerals in Sweden

Mineral ownership

The ownership of mineral deposits is not defined in Swedish law. Historically and to date, there has been a breakdown of claims between the state, land owners and the prospector/finder. The right to grant access to "concession minerals" and permits to exploit deposits is reserved to the state (i.e. the Mining Inspectorate). The "concession minerals" are legally defined and listed in the Minerals Act, consisting of metallic ores, a wide range of industrial minerals, coal, oil, gaseous hydrocarbons and diamonds. The long list of "concession minerals" includes: antimony, arsenic, beryllium, bismuth, cesium, chromium, cobalt, copper, gold, iridium, iron occurring in the bedrock, lanthanum and lanthanide series, lead, lithium, manganese, mercury, molybdenum, nickel, niobium, osmium, palladium, platinum, rhodium, rubidium, ruthenium, scandium, silver, strontium, tantalum, thorium, tin, titanium, tungsten, vanadium, yttrium, zinc and zirconium. It also includes andalusite, apatite, baryte, brucite, refractory clay or clinkering clay, coal, fluorspar, graphite, kyanite, magnesite, nepheline syenite, pyrite, pyrrhotite, rock salt or other similar salt deposits, sillimanite and wollastonite. Finally, it includes oil, gaseous hydrocarbons and diamonds.

The right to extract "non-concession minerals" (minerals not listed in the legal definition of concession minerals, e.g. aggregates, dimensional stone, limestone) belongs to the landowner. If the developer does not own the land in question, the right to explore and extract must be regulated by a contract with the landowner. Accordingly, an additional mining concession is not required for "non-concession minerals". The extraction of "non-concession minerals" is mainly regulated by the Environmental Code, which includes the permitting process (environmental permit).

1.3. Legislation governing mineral exploration and extraction

The primary law concerning the extraction of minerals is the Minerals Act (1991:45) as amended subsequently. The Minerals Act is a merger of the old 1974 Mining Act (staking system) and the 1974 Minerals Act (concession system). It governs mining and exploration for the minerals covered by the Minerals Act (concessions minerals, traditional metals, many industrial minerals, as well as oil, gas, and diamonds), irrespectively of who owns the land to be explored or mined. The Minerals Act was implemented on 1 July 1992. It has subsequently been amended as:

- 1 July 1993, abolition of the rules giving the state a half share in mines (1993:690),
- 1 July 1998, introduction of protection zone rules for mines (1998:165),
- 1 January 1999, adapted to the new Environmental Code (1998:808), which entered into force on the same date (1998:845),
- 1 May 2005, introduction of plan of operations (exploration may only be carried out with a valid plan of operations) and introduction of a minerals fee (2 ‰) to landowners and to the state (2005:161),
- 1 August 2014, more stringent and clearer requirements for a plan of operations, right to translation of the plan of operations into certain national minority languages (2014:782),
- 1 July 2015, exploration and extraction of oil and gas are not allowed at sea (2015:282),
- 1 January 2018, changes regarding the environmental impact assessment (2017:961),
- 1 August 2018, uranium is no longer a concession mineral (2018:642)

The Minerals Act is applicable in parallel with other legislation to all exploration and extraction works. Among the acts with provisions affecting the activities referred to in the Minerals Act are the following: the Planning and Building Act (2010:900), the Environmental Code (1998:808), the Cultural Heritage Act (1988:950) and the Off-Road Driving Act (1975:1313). The Environmental Code is particularly relevant, e.g. permits for extraction must be granted under both the Minerals Act and the Environmental Code. The Environmental Code can also apply for situations and/or measures taken during the exploration phase, thus requiring certain approvals, permits or dispensation from nature protection rules. Aggregates (construction minerals and industrial minerals) are not covered by the Minerals Act and are consequently mainly governed under the Environmental Code.

Table 1: Sweden. Legislation relevant to exploration and extraction permitting.

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
mining, minerals management, technical safety, concession	SE-L1	Minerals Act (1991:45) (Minerallag)	https://www.sgu.se/en/mining-inspectorate/legislation/minerals-act-199145/	Y	N	Y	Y	(Y)	Y	Y	Y	Unofficial translation (only includes amendments up to 8 March 2018)
	SE-L2	Minerals Ordinance (1992:825) (Mineralförordning)	https://www.sgu.se/en/mining-inspectorate/legislation/the-minerals-ordinance-1992285/	Y	N	Y	Y			Y	Y	
	SE-L3	Environmental Code (1998:808), chapter 3 and 4, 5 section 15 and chapter 6 sections 28-46	http://www.government.se/contentassets/be5e4d4ebdb4499f8d6365720ae68724/the-swedish-environmental-code-ds-200061	Y	N	N	Y	Y	Y	Y	Y	(Areas of national interests). Chapter 3 - Basic provisions concerning the management of land and water areas. Chapter 4 - Special provisions concerning land and water management in certain areas in Sweden. Chapter 5 – Environmental Quality Standards Chapter 6 – Environmental Impact Assessment

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
	SE-L4	Protection Act (2010:305)	Not available	Y	N	(Y)	(Y)	(Y)	N	N	Y	Regards certain defence objects/areas and some other important buildings and areas.
environment	SE-L5	Environmental Code (1998:808)	http://www.government.se/contentassets/be5e4d4ebdb4499f8d6365720ae68724/the-swedish-environmental-code-ds-200061	Y	N	Y	Y	Y	Y	Y	Y	The Environmental Code replaced 15 previous environmental acts which were amalgamated into the Code. A number of ordinances are linked to the Code.
	SE-L6	Ordinance concerning Environmental Regulation (2013:251)	http://www.ecollex.org/details/legislation/environmental-regulation-2013251-lex-faoc124075/	Y	N	(Y)	Y	Y	Y	(Y)	Y	Linked to chapter 9 of the Environmental Code.
	SE-L7	Ordinance about Environmental Hazardous Activities and Protection of Public Health (1998:899)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-1998899-om-miljofarlig-verksamhet_sfs-1998-899	Y	N	(Y)	Y	Y	(Y)	Y	Y	Same as above.

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
	SE-L8	Ordinance about Notification for Consultation (1998:904)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-1998904-om-anmalan-for-samrad_sfs-1998-904	Y	N	Y	N	N	Y	N	N	Linked to chapter 12 section 6 in the Environmental Code.
	SE-L9	Ordinance about Environmental Impact Assessments (1998:905)	http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-1998905-om_sfs-1998-905	Y	N	Y	Y	Y	N	Y	Y	Linked to chapter 6 in the Environmental Code - Environmental Impact Assessments (EIA).
	SE-L10	Ordinance about extraction waste (2013:319)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-2013319-om-utvinningsavfall_sfs-2013-319	Y	N	N	Y	Y	N	Y	Y	Linked to chapter 15 in the Environmental Code - Waste. (EC Directive on the management of waste from the extractive industries)

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
	SE-L11	Species Protection Ordinance (2007:845)	http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/artskyddsforordning-2007845_sfs-2007-845	Y	N	(Y)	(Y)	N	N	Y	Y	Linked to chapter 8 in the Environmental Code - Special provisions concerning the protection of animal and plant species. (EC Bird Directive and Habitats Directive)
	SE-L14	Work Environment Act (1977:1160)	https://www.av.se/globalassets/filer/publikationer/presentationer/presentationer/th-e-swedish-work-environment-act-presentation.pdf	Y	N	Y	Y	N	N	N	Y	Swedish Work Environment Authority is the responsible governmental agency. AFS (Authority Statute Book) are legally binding provisions.
	SE-L15	The Work Environment Ordinance (1977:1166)	https://www.av.se/globalassets/filer/publikationer/presentationer/presentationer/th-e-swedish-work-environment-act-presentation.pdf	Y	N	Y	Y	N	N	N	Y	

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
nature conservation, forestry	SE-L16	Environmental Code (1998:808), chapter 7	=	Y	N	Y	Y	N	Y	Y	Y	Chapter 7 - Protection of nature - includes protected areas, such as national parks, nature reserves, Natura 2000 etc. Exploration is prohibited in national parks.
	SE-L17	Ordinance on Protection of Areas under the Environmental Code (1998:1252)	http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-19981252-om-omradeskydd-enligt-sfs-1998-1252	Y	N	Y	Y	N	Y	Y	Y	Contains provisions that regulate protection of areas listed under chapter 7 in the Environmental Code. (EC Bird Directive and Habitats Directive)
	SE-L18	Forestry Act (1979:429)	http://www.skoqsstyrelsen.se/en/forestry/The-Forestry-Act/The-Forestry-Act/	Y	N	Y	Y	N	N	Y	Y	Swedish Forest Agency
	SE-L19	Forestry Ordinance (1993:1096)	http://www.skoqsstyrelsen.se/en/forestry/The-Forestry-Act/The-Forestry-Act/	Y	N	Y	Y	N	N	Y	Y	Swedish Forest Agency

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
water management	SE-L20	Environmental Code (1998:808), chapter 11		Y	N	N	Y	N	N	Y	Y	Chapter 11 - Water operations
	SE-L21	Ordinance on Management of the Quality of the Aquatic Environment (2004:660)		Y	N	N	Y	Y	N	Y	Y	(EC Water Framework Directive)
	SE-L22	Act on specific provisions on water operations (1998:812)		Y	N	N	Y	Y	N	Y	Y	
land use planning, spatial development, soil management	SE-L23	Environmental Code (1998:808), chapter 3 and 4		Y	N	N	Y	N	N	Y	Y	Chapter 3 and 4. See above
	SE-L24	Minerals Act (1991:45) Chapter 9		Y	N	N	Y	N	Y	N	Y	Chapter 9 - Proceedings for designation of land
	SE-L25	Real Property Register Act (2000:224)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2000224-om-	Y	N	Y	Y	Y	Y	N	Y	

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
			fastighetsregistret_sfs-2000-224									
transportation, construction, catastrophe protection, police, military	SE-L26	Planning and Building Act (2010:900)	http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Plan--och-bygglag-2010900_sfs-2010-900/	Y	N	N	Y	N	Y	Y	Y	Contains provisions that regulate building and construction of houses, industrial facilities etc. The Municipal Building and Environmental Committee approve permits.
	SE-L27	Civil Protection Act (2003:778)	https://www.msb.se/Upload/Om%20MSB/Lag_och_ratt/Civil%20Protection%20Act%20101227.pdf?epslanguage=en	Y	N	N	Y	Y	Y	Y	Y	Swedish Civil Contingencies Agency (MSB)
	SE-L28	Civil Protection Ordinance (2003:789)			N		Y	Y	Y	Y	Y	
	SE-L29	Act on measures to prevent and limit the consequences of major chemical accidents (1999:381)		Y	N	N	Y	Y	Y	Y	Y	MSB. (EC Seveso Directive)
	SE-L30	Off-Road Driving Act (1975:1313)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-	Y	N	Y	N	N	N	Y	Y	CABs can approve exemptions from the prohibition of driving motor driven vehicles in terrain under the Act. Also a

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
			forfattningssamlingen/terrangkornin.gslag-19751313.sfs-1975-1313									permission from the landowner is required.
	SE-L31	Off-Road Driving Ordinance (1978:594)	https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamlingen/terrangkornin.gslag-19751313.sfs-1975-1313	Y	N	Y	N	N	N	Y	Y	
culture heritage	SE-L32	Heritage Conservation Act (1988:950)	http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamlingen/kulturmiliolag-1988950.sfs-1988-950	Y	N	Y	Y	N	N	Y	Y	
	SE-L33	Heritage Conservation Ordinance (1988:1188)	http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamlingen/kulturmiliolag-19881188.sfs-1988-1188	Y	N	Y	Y	N	N	Y	Y	

Legislative sector	Code	English title	Web link	Permitting Provisions (Y/N)	Deadlines (Y/N)	Relevant to (Y/N)			Relevant to (Y/N)			Remarks
						exploration	extraction	post-extraction	local	regional	(central) national	
			g-1988950_sfs-1988-950									
public administration, court procedures	SE-L34	The Administrative Procedure Act (1986:223)		Y	N	Y	Y	Y	Y	Y	Y	For courts and all governmental agencies.
	SE-L35	Act (2010:921) about Land and Environmental Courts		Y	N	N	Y	Y	N	N	Y	Land and Environmental Courts

1.4. Authorities governing mineral exploration and extraction

The **competent authority for mining is the Mining Inspectorate**, headed by the Chief Mining Inspector (a government appointee), **who issues permits for mineral exploration (exploration permits) and extraction (exploitation or mining concessions) for concession minerals associated with the Minerals Act**. The Inspectorate is also the regulatory authority for mining and exploration activities, it supervises and carries out inspections of exploration and mines. The Mining Inspectorate is part of the Geological Survey of Sweden (SGU), the competent authority for issues relating to bedrock, soil and groundwater in Sweden. Although the Mining Inspectorate is part of the SGU, it has an independent role in the exercise of authority concerning permitting and supervising in matters of exploration and mining activities. The SGU has a more general role and, among others, provides public information about exploration and mining and regarding mineral legislation. The SGU is under the jurisdiction of the Swedish Ministry of Enterprise and Innovation. The permits required for exploration and extraction of metalliferous minerals are decided step by step and by different authorities.

Exploration permitting: An application for the granting of an exploration permit or extraction concession is considered by the Chief Mining Inspector. An application for exploration permit may be determined without any affected party other than the applicant having had the opportunity to express its opinion. Before deciding about an exploration permit, the Chief Mining Inspector submits the application to the relevant municipality, the County Administrative Board and, in reindeer herding areas, the Sámi Parliament of Sweden, which might express its opinion on the application. However, besides an exploration permit, a prospector must produce a plan of operations that needs to be valid before the exploration work can start. The plan of operations (or work plan) shall be communicated to landowners and holders of specific rights that are affected by the

exploration work. If the prospector and holders of specific rights are not able to agree upon how the exploration work should be conducted, the Chief Mining Inspector can determine and decide on the plan of operations for it to become valid. In addition to the exploration permit and the plan of operations, the exploration work might also require permits according to nature or cultural heritage protection reasons. If so, those permits will be assessed and tried by the competent public entities and need to be in place before the exploration work commences. Test extraction during the exploration phase requires a specific environmental permit issued by the County Administrative Board.

Extraction permitting: Extraction requires permits both according to the Minerals Act (exploitation concession) and according to the Environmental Code (environmental permit). An application for an exploitation concession are not only tried according the Minerals Act but also with regard to the Environmental Code's provisions of housekeeping of natural resources (Chapter 3 – 4), which in turn requires an environmental impact assessment (Chapter 6). The extraction permit is normally applied for and granted before the permitting procedure for an environmental permit begins. **When considering an application for an exploitation concession,** the Chief Mining Inspector shall, with regard to the application of Chapters 3, 4 and 6 of the Environmental Code, **mandatorily consult the County Administrative Board of the county or counties in which the concession area is situated.** Should the Chief Mining Inspector and the County Administrative Board not agree, the case is referred to the Swedish Government for a decision. The government also is the competent authority to retry appeals of the Chief Mining Inspector's decisions regarding extraction permits.

The environmental permit required for mineral extraction under the Swedish Environmental Code (e.g. Chapter 9 and 11) is issued by the "*miljöprövningsdelegationen*" (MPD) at the County Administrative Board (e.g. Chapter 9) or the regional Land and Environment Courts (e.g. Chapter 9 and 11). Test/trial mining according to Chapter 9 may be issued by the MPD. Decisions under the Planning and Building Act are handled by the local municipalities. An environmental permit for activities that generates waste must include a general condition regarding a financial security to safeguard the required waste management actions. For mining activities, the financial security often is decided to also cover probable remediation and restoration measures in the mining area. If there is a risk that the exploration, mining or other related activities may affect a protected area, such as Natura 2000 areas, or protected species, separate permits may be required. Such permits are often decided by the Land and Environment Court as part of the application for an environmental permit, or (if an environmental permit is not required or if the applicant chose to go for parallel processes) decided by the County Administrative Board. A permit under the Cultural Heritage Act may also be mandatory and is permitted by the County Administrative Board.

Post-extraction permitting: Most changes in methodology and/or extraction volumes require a new or changed environmental permit and consequently, a new application and a new/updated EIA must therefore be produced. On the other hand, permitting issues regarding closure, remediation and after-care measures are normally included in the extraction permitting process. This means that if the existing environmental permit is not subject to changes that are necessary for the closure operations, the post- extraction phase does not require a specific permitting step, but it will be considered by the County Administrative Board when it is time for closure.

Extraction of construction minerals and industrial minerals does not require an exploitation permit under the Minerals Act, but only an environmental permit. The permitting process for environmental permit to extract construction minerals and industrial minerals is mainly the same as for metalliferous minerals described above.

Table 2: Sweden. Relevant authorities in exploration and extraction permitting.

	Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
						exploration	extraction	post extraction		
First-instance permitting (local, regional, central, national)	SE-E1	Bergsstaten	Mining Inspectorate of Sweden	http://www.sgu.se/bergsstaten/	Governmental national agency that issues permits for exploration (exploration permits) and mining (exploitation concessions). Also carry out inspections on active mines.	Y	Y	(Y)	Minerals Act (1991:45), Minerals Ordinance (1992:285)	Only apply to the so called "concessions minerals" listed in the Minerals Act. All other minerals/materials are landowner minerals (i.e. aggregates, limestone, dimensional stone etc.) and are regulated mainly according to the Environmental Code. Exploration work may only be carried out in accordance with a valid work plan according to chapter 3, section 5 of the Minerals Act.
	SE-E2	Länsstyrelsen Blekinge Län	County Administrative Board (CAB) of Blekinge	www.lansstyrelsen.se/blekinge	The County Administrative Board (governmental regional body) takes part in the environmental evaluation of applications for exploration permits and exploitation concessions. Regarding exploitation concessions CAB also states if the area is appropriate for mining according to the chapter 3 and 4 of the	Y	Y	(Y)	Environmental Code (1998:808), Off-road Driving Act (1975:1313), Off-road Driving Ordinance (1978:594), Heritage Conservation Act (1988:950), Heritage Conservation Ordinance (1988:1188), Forest Conservation Act (1979:429), Forest Conservation Ordinance (1993:1096),	There are 21 (regional) CABs in Sweden (the 21 counties belong to the NUTS 3 level). To start mining of non-concession minerals the operator must have an environmental permit. With the aim to simplify the environmental assessments was the concentration of assessment procedures for operations that require a permit to just 12 County Administrative Boards instead of the previous 21 = miljöprövningsdelagator MPD

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
				Environmental Code.				Ordinance about Notification for Consultation (1998:904)	
SE-E3	Länsstyrelsen Dalarnas Län + MPD	County Administrative Board (CAB) of Dalarna	http://www.lansstyrelsen.se/dalarna/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code (only for test/trial mining)	Y	Y	(Y)	Same as above	Same as above
SE-E4	Länsstyrelsen Gotlands Län	County Administrative Board (CAB) of Gotland	http://www.lansstyrelsen.se/gotland/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above
SE-E5	Länsstyrelsen Gävleborg	County Administrative Board (CAB) of Gävleborg	http://www.lansstyrelsen.se/gavleborg/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above
SE-E6	Länsstyrelsen	County Administrative Board	http://www.lansstyrelsen.se/halland	Same as above + grants the environmental	Y	Y	(Y)	Same as above	Same as above

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
	Hallands Län + MPD	(CAB) of Halland	/en/Pages/default.aspx	permit according to the chapter 9 of the Environmental Code					
SE-E7	Länsstyrelsen Jämtlands Län	County Administrative Board (CAB) of Jamtland	http://www.lansstyrelsen.se/jamtland/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above
SE-E8	Länsstyrelsen i Jönköpings Län	County Administrative Board (CAB) of Jonköping	http://www.lansstyrelsen.se/jonkopings/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above
SE-E9	Länsstyrelsen Kalmar Län + MPD	County Administrative Board (CAB) of Kalmar	http://www.lansstyrelsen.se/kalmar/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E10	Länsstyrelsen i Kronobergs Län	County Administrative Board (CAB) of Kronoberg	http://www.lansstyrelsen.se/kronoberg/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
SE-E11	Länsstyrelsen Norrbotten + MPD	County Administrative Board (CAB) of Norrbotten	http://www.lansstyrelsen.se/Norrbottn/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E12	Länsstyrelsen Skåne + MPD	County Administrative Board (CAB) of Skåne	http://www.lansstyrelsen.se/skane/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E13	Länsstyrelsen Stockholm + MPD	County Administrative Board (CAB) of Stockholm	http://www.lansstyrelsen.se/stockholm/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E14	Länsstyrelsen Södermanlands Län	County Administrative Board (CAB) of Södermanland	http://www.lansstyrelsen.se/sodermanland/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
SE-E15	Länsstyrelsen Uppsala Län + MPD	County Administrative Board (CAB) of Uppsala	http://www.lansstyrelsen.se/Uppsala/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E16	Länsstyrelsen Värmland	County Administrative Board (CAB) of Värmland	http://www.lansstyrelsen.se/Varmland/en/Pages/default.aspx	Same as above	Y	Y	(Y)	Same as above	Same as above
SE-E17	Länsstyrelsen Västerbotten + MPD	County Administrative Board (CAB) of Västerbotten	http://www.lansstyrelsen.se/vasterbotten/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E18	Länsstyrelsen Västernorrland + MPD	County Administrative Board (CAB) of Västernorrland	http://www.lansstyrelsen.se/vasternorrland/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E19	Länsstyrelsen	County Administrative Board	http://www.lansstyrelsen.se/vastmanland	Same as above	Y	Y	(Y)	Same as above	Same as above

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
	Västmanlands län	(CAB) of Västmanland	anland/en/Pages/default.aspx						
SE-E20	Länsstyrelsen Västra Götalands län + MPD	County Administrative Board (CAB) of Västra Götaland	http://www.lansstyrelsen.se/vastra-gotaland/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E21	Länsstyrelsen Örebro län + MPD	County Administrative Board (CAB) of Örebro	http://www.lansstyrelsen.se/orebro/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above
SE-E22	Länsstyrelsen Östergötland + MPD	County Administrative Board (CAB) of Östergötland	http://www.lansstyrelsen.se/ostergotland/en/Pages/default.aspx	Same as above + grants the environmental permit according to the chapter 9 of the Environmental Code	Y	Y	(Y)	Same as above	Same as above

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
SE-E23	Nacka Tingsrätt	Land and Environment Court at District Court in Nacka	http://www.nackatingsratt.domstol.se/	Grants the environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code	N	Y	Y	Environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code (1998:808)	<p>To start a mine the operator also must have an environmental permit (besides an exploitation concession). This is correct only for concession minerals.</p> <p>To start mining of non-concession minerals the operator must have an environmental permit.</p> <p>There are 5 Land and Environment Courts in Sweden responsible for different geographical regions</p>
SE-E24	Vänersborg Tingsrätt	Land and Environment Court at District Court in Vänersborg	http://www.vanersborgs.tingsratt.domstol.se/	Grants the environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code	N	Y	Y	Environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code (1998:808)	Same as above (SE-E23)
SE-E25	Växjö Tingsrätt	Land and Environment Court at District Court in Växjö	http://www.vaxjotingsratt.domstol.se/	Grants the environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code	N	Y	Y	Environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code (1998:808)	Same as above (SE-E23)

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
				11) of the Environmental Code				Code (1998:808)	
SE-E26	Umeå Tingsrätt	Land and Environment Court at District Court in Umeå	http://www.umeatingsratt.domstol.se/	Grants the environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code	N	Y	Y	Environmental permit according the chapter 9 (and usually also chapter 11) of the Environmental Code (1998:808)	Same as above (SE-E23)
SE-E27	Östersund Tingsrätt	Land and Environment Court at District Court in Östersund	http://www.domstol.se/Kontaktuppgifter/Ostersunds-tingsratt/?tab=Courtoffice	Grants the environmental permit according to the chapter 9 (and usually also chapter 11) of the Environmental Code	N	Y	Y	Environmental permit according the chapter 9 (and usually also chapter 11) of the Environmental Code (1998:808)	Same as above (SE-E23)
SE-E28	Naturvårdsverket	Swedish Environmental Protection Agency	http://www.swedishepa.se/	May take part in the environmental permit process and also act as a party.	N	Y	Y	Environmental Code (1998:808)	

Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
					exploration	extraction	post extraction		
SE-E29	Havs- och vattenmyndigheten	Swedish Agency for Marine and Water Management	https://www.havochvatten.se/en/start.html	May take part in the consultation process regarding environmental permitting from the Land and Environmental Courts. Could also be a party.	N	Y	(Y)	Environmental Code (1998:808)	
SE-E30	Myndigheten för samhällsskydd och beredskap (MOB)	Swedish Civil Contingencies Agency	https://www.msb.se/en/						
SE-E31		Municipality	https://skl.s.se/hanster/kommuner/ledning/kommuner/1246.html	Provides the necessary building permission	Y	Y	Y	Planning and Building Act (2010:900)	There are 290 municipalities in Sweden
SE-E32	Sametinget	Sámi Parliament of Sweden	https://www.sametinget.se/en/om-oss/	Expresses a legally non-binding opinion (statement) prior to the decision by the Mining Inspectorate in exploration and extraction permits if a potential project is located within their territory and	Y	Y	Y		Expresses its opinion (statement) if the project is located in Sami territories where reindeer herding takes place and herding rights exist

	Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
						exploration	extraction	post extraction		
					reindeer herding rights exist					
Second instance permitting (regional, central, national)	SE-E33	Förvaltning srätten	Administrativ e Court	http://www.domstol.se/Funktioner/English/The-Swedish-courts/Courty-administrative-courts/	If a decision of an exploration permit by the Chief Mine Inspector is appealed	Y	N	N	Minerals Act (1991:45)	12 Adm. Courts (Luleå, Umeå, Härnösand, Falun, Uppsala, Stockholm, Karlstad, Linköping, Gothenburg, Jönköping, Växjö, Malmö). But all appeals regarding exploration permits are handled by the Administrative Court in Luleå.
	SE-E34	Regeringen (Näringsdepartementet)	The Government (Ministry of Enterprise and Innovation)	http://www.government.se/	If the Mining Inspectorate and the County Administrative Board do not agree about a decision of an exploitation concession.	N	Y	N	Minerals Act (1991:45)	

	Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
						exploration	extraction	post extraction		
Court jurisdiction	SE-E35	Kammarrätten	Administrative Court of appeal	http://www.domstol.se/Funktioner/English/The-Swedish-courts/Administrative-courts-of-appeal/	Determines appeals from any of the administrative courts	Y	N	N		4 Adm. Courts of appeal
	SE-E36	Högsta Förvaltningsdomstolen	Supreme Administrative Court	http://www.domstol.se/Funktioner/English/The-Swedish-courts/The-Supreme-Administrative-Court/	Determines appeal from any of the Administrative Courts of appeal and from the Government (judicial review).	Y	Y	N		
	SE-E37	Mark- och miljödomstolen (MMD)	Land and Environment Court	http://www.domstol.se/Funktioner/English/The-Swedish-courts/District-court/Land-and-Environment-Courts/	Land and Environmental Courts are special courts which hear cases that, for example, concern environmental and water issues, property registration and planning and building matters.	N	Y	Y	Environmental Code (1998:808)	To start a mine the operator also must have an environmental permit (besides an exploitation concession). There are 5 Land and Environment Courts in Sweden responsible for different geographical regions

	Code	Name of entity	English name of entity	Address / web access	Role in permitting	Relevant to			Statute or relevant piece of legislation	Remarks
						exploration	extraction	post extraction		
	SE-E38	Mark- och miljööverdomstolen (MÖD)	Land and Environment Court of Appeal	http://www.svea.se/Funktioner/Englisch/The-Swedish-courts/Court-of-appeal/	Determines appeals from all the Land and Environmental Courts.	N	Y	Y	Environmental Code (1998:808)	Part of the Svea Court of Appeal (Svea Hovrätt)

1.5. Licensing procedures for exploration

Description of the permitting procedures

An exploration permit proceeding is initiated by a natural person/pro prospector who is legally competent or by a legal person. The application for an exploration permit should be submitted to the Chief Mining Inspector (the Mining Inspectorate). There are no statutory restrictions with respect to foreigners.

The application has to be in writing and include the name, domicile and address of the applicant and a contact person if the applicant is a legal entity, specification of the area(-s) referred to, specification of the concession minerals covered by the application, designation of the properties (landowners) and holders of special rights affected and their addresses, information of land restrictions that may constitute impediments, particulars confirming that exploration work will lead to finding of concession minerals and also proposal of a name for the exploration area. The applicant must also furnish particulars of whether, and if so how, the planned activity's impact on public interests and private rights and, if so, how those interests and rights are to be protected.

After receiving the application, the Chief Mining Inspector sends a notice of the application to the property owners and other known right holders affected. The municipality and the County Administrative Board (MPDs) concerned are entitled to submit a statement over the application within a certain time. If reindeer herding right exists in the area also the Sámi Parliament is entitled to submit a statement.

Exploration may be carried out only by the holder of an exploration permit and in accordance with a valid plan of operations. The plan of operations must be written in Swedish and contain the following:

- The permit holder's name, telephone number, postal address and e-mail address, as well as the same information for a contact person if the permit holder is a legal entity.
- A description of the nature of a plan of operations and information that those affected by the plan have the opportunity to influence its contents by objecting to it.
- A description of the planned work together with a timetable for the operations.
- A map showing the area in which the exploration work will be carried out, together with the property boundaries (and property names) in that area.
- A judgement of what public interests and private rights that might be affected by the exploration work.
- Information on when any objection to the content of the plan of operations must be received by the permit holder and the consequences if no objection is made.
- Information that, upon request, those affected by the plan of operations are entitled to be notified when exploration work on the property to which their rights relate will begin together with information on when such a request must be received by the permit holder.
- Information about the permits that the permit holder already holds, has applied for or intends to apply for, or information about the notifications the permit holder has made under other laws in connection with the exploration work.
- An assessment of the potential damage or encroachment that will be caused by the exploration work, together with information on how such damage or encroachment will be indemnified. The plan of operations must also contain information about the form and amount of financial security that the permit holder will deposit in order to safeguard indemnification

As a general requirement, the exploration work as well as the timetable described in the plan of operations should be adjusted to the current land use in the area where the exploration work is to be conducted.

Objections by the affected right holders to the content of the plan of operations must be communicated in writing to the permit holder within three weeks, counting from when the holder of the right receives the plan of operations. A plan of operations becomes valid if no objections are made within a certain time, or if an agreement is reached with the landowners and other concerned right holders. If objections have been raised, the holder of the exploration permit may request that the plan of operations is examined and finally decided by the Chief Mining Inspector.

Test extraction/mining is considered to be part of the exploration work and is thus covered by the requirements for an exploration permit and a valid plan of operations. However, in addition to the exploration permit, test mining also requires an environmental permit under the Environmental Code and is normally issued by the MPD at certain County Administrative Boards.

Exploration Area

An exploration area should be of suitable shape and size and not be larger than it can be explored appropriately by the prospector. An exploration permit may not be granted within a protection zone covering a distance of 1000 metres from an existing exploitation concession area.

Prerequisites

An exploration permit shall be granted, if there is reason to assume that exploration in the area can lead to the discovery of concession minerals. A permit shall however not be granted if it is obvious that the applicant has not the possibility or intention to conduct appropriate exploration or has earlier shown unsuitable behaviour to conduct exploration work.

Time

An exploration permit is valid for a period of three years from the date of issue. After that, on application, it may be extended by another period of up to a maximum of three years if suitable exploration has been carried out within the area. The same applies if the permit holder can present acceptable reasons why exploration has not been carried out and shows it likely that the area will be explored within the time for the applied extension. The period of validity of the permit may then be further extended up to a total of four additional years if there are special grounds for such extension. Should the holder need additional time after that the validity of the permit can be further extended up to five years, but only if the holder can show that there are exceptional reasons justifying such extension. In summary, this means that the longest possible period for an exploration permit to be valid is a maximum of fifteen years.

Limitations

Exploration (and extraction) works are not allowed in national parks. There are 29 national parks in Sweden. Moreover, without approval by the County Administrative Board, exploration work is not allowed to be undertaken in some specific areas, namely:

- within (at least) 200 meters from objects or places that need stronger protection for security reasons or is needed for safety reasons due to military activities ("protected objects"),
- churchyards or other burial grounds,
- certain areas in the Swedish mountains.

In addition, exploration work is not allowed to be undertaken without approval by the Chief Mining Inspector:

- within 30 metres from public roads, railways, canals or airports,
- within 200 metres of residential buildings,
- within 200 metres from churches or other assembly halls, educational establishments, hotels or pensions and also within 200 metres from, health facilities, dormitories or similar establishments intended for more than 50 persons, within 200 metres from an electric power station or an industrial plant,
- within areas included in municipal zoning plans or layout plans according to the Planning and Building Act (2010:900),

Approval by the Chief Mining Inspector is however not required if the exploration work in the above listed localities (paragraph 2-4) is admitted by the owner of the land and/or the building concerned and also by occurring usufructuaries.

Moratorium – waiting period

When an exploration permit (or exploitation concession) has expired, applications for exploration permits for the same area or part of it will not be considered until at least one year after the former permit was terminated. If special reasons apply, the Chief Mining Inspector may allow an exception to be made from that provision.

Damage

The explorer has to grant a financial security for the compensation of potential damage and encroachment caused by the exploration work. The financial security is kept by the Mining Inspectorate and has to be granted before the exploration work can start.

Reports

When an exploration permit is terminated without the granting of an exploitation concession within the exploration area, the permit holder shall – if exploration work has been carried out professionally – within three months at the latest provide a report of the exploration performed. A map of the explored area shall be appended to the report.

The report shall state:

- who has conducted the exploration work,
- the kind of exploration work carried out,
- the extent of the exploration work and,
- the results, in the form of raw data.

The report is confidential for a period of maximum 4 years but could become public earlier. The results are then available at the Geological Survey of Sweden's Mineral Resources Information Office in Malå, Västerbotten County.

Public entities involved in the process

Applications for exploration permits (and exploitation concessions) under the Minerals Act are administered by the Mining Inspectorate. In the process for exploration permits, the County Administrative Board, the municipality and the Sami Parliament are involved in the process and have right to make submissions over the application. Application for an environmental permit for test extraction is tried by the County Administrative Board (the environmental permitting office at the County Administrative Board).

Geographic areas covered by the permit

An exploration permit is granted for a specific area. There is no legal limitation of the size of the area except that it should be of suitable shape and size and be not larger than it can be explored appropriately by the prospector. An exploration permit may not be granted within a protection zone covering a distance of 1000 metres from an existing exploitation concession area.

Rights and duties of the licensee

An exploration permit gives the licensee an exclusive right of exploration and access to the land covered by the permit area and for the concession minerals specified in the permit. Exploration permits may not be granted for the same minerals within an area where another party already holds a permit for exploration or exploiting the deposits concerned. The holder of an exploration permit entails a preferential right to be granted an exploitation concession. If two or more parties have applied for exploration permits in the same area, the first party to apply has the priority (the claim system).

Legal nature of the rights

The formal ownership of minerals in Sweden is not statutory defined. Historically and to date, there has been a breakdown of claims between the state, land owners and the prospector/finder. The state has an exclusive right to decide on permits for exploration (and extraction) of concession minerals.

All minerals ("concession minerals") that are covered by the Minerals Act can be included in an exploration permit. Minerals not covered by the Minerals Act, such as construction minerals and industrial minerals, belong to the landowner and can be explored by the landowner in its sole discretion. The same rules apply to all types of landowners, whether it is the state, private entities or individuals. A landowner may also carry out exploration for concessions minerals without an exploration permit on his own land with the exceptions of oil, gas and diamonds. A landowner is however not entitled to do so if an exploration permit already has been granted to another party.

An exploration permit can be transferred to a different holder after an application to the Chief Mining Inspector. Transfer of the permit can be granted if the future permit holder meets the conditions set forth in the Minerals Act.

Links between the exploration permit and a future license for extraction

A holder of an exploration permit has the preferential right to an extraction permit. This is reflected by the Minerals Act stating that an exploration permit holder is legally entitled to an exploitation concession if certain basic requirements are satisfied. However, the part of the extraction permitting process that involves trial of the Environmental Code's provisions of housekeeping of natural resources, and the environmental impact assessment necessary for that trial, has caused a trend of increasingly detailed and more difficult trials for extraction permits, irrespective of the preferential right for an extraction permit.

An exploration permit could be valid for 15 years at the longest. After that the holder of an exploration permit has to apply for an exploitation concession if the permit holder intends to keep the exclusive rights to the deposit.

Average time to get a permit

The latest statistics (2018) from the Mining Inspectorate show that the total period (from application date to final decision) was 99 days for new exploration permits and 70 days for extended exploration permits.

Main problems or major modifications related to exploration permitting

In August 2014, an amendment to the Minerals Act entered into force. The statutory amendment clarifies and to some extent also widens the obligations of exploration permit holders to provide information about their exploration works. The changes are mainly aiming to achieve a more transparent process, but they can clearly cause some more administrative work for the permit holder compared to before. For instance, the holders of interests affected by the exploration work may in some cases order the prospector to translate the proposed work plan to one of three officially recognized minority languages in Sweden.

A difficulty that sometimes occurs is the permit holder's obligation to serve the plan of operations to holder of rights that are affected by the planned exploration work. To start the exploration work, the plan of operation must be "valid". The plan becomes valid if no objections have been made within three weeks from the day it was given to the affected party (land owner or holder of rights). Thus, serving of the proposed plan of operation is crucial for the possibility to start the exploration work.

1.6. Licensing procedures for extraction

Description of the permitting procedures

The permitting procedure necessary **for mining operations of concession minerals** consists of two main parts, **permit according to the Minerals Act (exploitation concession) and permit according to the Environmental Code (environmental permit)**. There is no legal obstacle to perform the two permitting processes in parallel, but usually the procedure to obtain an extraction concession is undertaken before the application for an environmental permit is filed.

To start extracting non-concession minerals the operator (only) must have an environmental permit.

An application for an exploitation concession shall be in writing and be submitted to the Chief Mining Inspector. It shall be accompanied by an environmental impact assessment (EIA) according to the chapter 6 sections 28–46 in the Swedish Environmental Code and contain particulars of the name, domicile and address of the applicant, and a person to contact if the applicant is a legal entity, the concession mineral or minerals to which the application relates, the area and the period to which the application relates, the properties affected by the application and the names and addresses of the property owners and of other affected parties known to the applicant.

Part of the permitting process is to make clear if mining is considered to be an appropriate land use in the area in question. This assessment mainly covers whether there are impediments against extraction due to protected areas, or areas that should be protected since land use for other reasons of common interest may be prevented or impeded by possible mining operations. If it is concluded that the area in question is of national interest for both mining and other purposes which are incompatible, precedence shall be given to the purpose or purposes which is decided to promote long-term management of land, water and the physical environment in general in the most appropriate way.

The application process also determines whether other parties have applied for a concession permit for the same area or if the application area is included or affected by existing exploration permits or exploitation concessions. The applicant is to present the planned activity's impact on public and private interests and the measures that, in the applicant's view, are necessary to protect public interests and private rights. The applicant should also describe the planned activities, together with an investigation of the applicant's technical and financial capacity to complete the plan.

The applicant shall attach a map and a description of the area to which the application relates, a report on the results of the exploration work undertaken, geological and geophysical maps that have been prepared and any other studies that may be relevant to an assessment of whether an economically viable deposit has been discovered and a plan of operations for the operations planned.

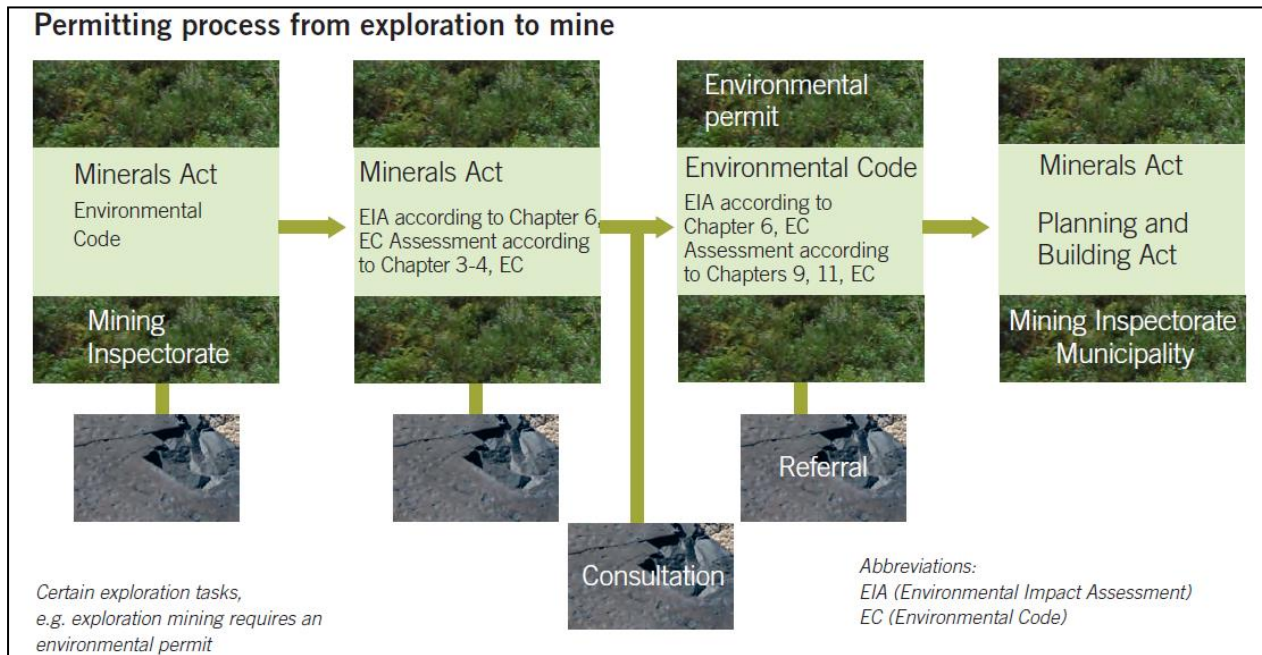
The Chief Mining Inspector shall send notice of the application and the EIA to the property owners affected and other right holders identified in the Minerals Act. The Chief Mining Inspector should also announce that objections to the application are to be filed in writing to the Chief Mining Inspector within a certain time, at least four weeks after the announcement was published, and that objections to the EIA are to be lodged with the County Administrative Board within the same time. When a decision regarding exploitation concession is taken it shall be sent to the County Administrative Board, to the cadastral agency (*Sw: Lantmäteriet*), to the municipality concerned and to the Sámi Parliament in the event that the area is used for reindeer herding.

Besides the exploitation concession and the environmental permit, the developer normally needs permits under the Planning and Building Act. The local municipality is responsible for permissions required under the Planning and Building Act.

To sum up, in Sweden the Chief Mining Inspector grants permits for the exploitation of concession minerals and the terms and conditions governing such a license are set down in the Swedish Minerals Act (1991:45). If the exploration work done indicates there are deposits of such quality that they would be economically profitable to extract and that their geographical location is suitable with regard to the principles of natural resource management, the Chief Mining Inspector may grant an exploitation concession. An exploitation concession is normally granted for 25 years. The Chief Mining Inspector also establishes the level of compensation that the mining enterprise must pay to the landowner and to the state, the "minerals fee". The minerals fee was introduced in 2005 and means

that the landowner is entitled to 0.15 percent of the value of the minerals extracted and the state is entitled to 0.05 percent.

Landowner minerals are extracted according to agreements between the landowner, who makes the land available, and the enterprise that will extract the minerals. The extracting of both types of minerals must fulfil the same environmental requirements as other industrial activities. Prior to the extraction of ore and minerals, the planned activities must be tested against the provisions laid down in the Swedish Environmental Code and the Swedish Planning and Building Act (2010:900).



Source: Government Offices of Sweden (2013)

Extraction Area

An exploitation concession is valid for a definite area, which is decided on the basis of the extent of the deposit, the purpose of the concession and other circumstances.

Prerequisites

A concession shall be granted if:

- a mineral deposit has been found which can probably be exploited economically,
- the location and nature of the deposit does not make it inappropriate that the applicant is granted the requested concession and
- in the case of oil and gas, the applicant is considered appropriate for the extraction of the deposit.

In addition to the Minerals Act, the Environmental Code (1998:808) is partly applicable in matters concerning the granting of a concession. This means, inter alia, that an Environmental Impact Assessment (EIA) shall be contained in an application for an exploitation concession. The EIA is needed to evaluate if mineral exploration in the area in question is considered to be the most appropriate land use in terms of housekeeping of natural resources. Also, already at this early stage, it should be determined if mineral exploration at the location is likely to require a specific permit for affecting a Nature 2000 area.

Time

An exploitation concession is granted for a period of 25 years unless the applicant requests a shorter period of time. The concession period is extended by ten years at a time without application if regular extraction is in progress when the period of validity expires. A shorter period may be decided at the request of the concession holder.

Designation of land

A legal proceeding for designation of land is held at the request and cost of the concession holder. This part is usually conducted after the environmental permit has been granted. The procedure is carried out by the Chief Mining Inspector and determines what land within the concession area the concession holder may use for extraction of the mineral deposit. The designation also includes a decision regarding what land, within or outside the concession area, the concession-holder may use for activities related to the extraction. In connection to the latter part, the nature of the activity shall be stated by the applicant. When an exploitation concession is terminated, the concession-holder shall, at that date, forfeit the right to land assigned to him. The procedure of land designation is mandatory even if the concession holder owns the land, in order to make sure that the right to exploit is connected to the possibility to do so.

Minerals fee

When the mine is operational, the holder of the exploitation concession must pay an annual minerals fee to the landowners of the concession area and to the State. The fee is 2 per mille of the average value of the concession minerals mined, of which 1.5 per mille is paid to the landowners to be distributed among them in proportion to their share of the concession area. The remaining 0.5 per mille is paid to the State to be used for research and development in the field of sustainable development of mineral resources.

Health and safety

The principal health and safety law is the Work Environment Act (1977:1160), which is applicable in all situations where an employee performs work for an employer. The Work Environment Act is a framework Act and detailed regulations are found in the provisions issued by the Swedish Work Environment Authority, which is the competent and regulatory authority concerning work environment issues in Sweden.

Environmental permit (according to the Swedish Environmental Code)

In order to conduct mining operations of concession minerals, the exploiter does not only need an exploitation concession under the Minerals Act, but also an environmental permit under the Environmental Code. To start mining of non-concession minerals the operator (only) must have an environmental permit. Permits under the Environmental Code are granted by the Land and Environment Court or by the MPD (*miljöprövningsdelegationen*) at a County Administration Board depending on the operations.

An application for an environmental permit must be accompanied by an environmental impact assessment (EIA) and a technical description of the planned operations. It is the duty of the applicant to deliver the investigations and descriptions of the planned activities that is needed to try the application. The Land and Environment court must assess if the content of the permit application and the necessary supportive documentation meet the requirements for a satisfactory assessment of the planned mining activity. Both (among others) the County Administrative Board and the Swedish Environmental Protection Agency are entitled to become legal part in the permitting process, meaning for example a right to request clarifications of the documentation, to make legal statements and to appeal

against the judgement of the court. An application with deficiencies that cannot be remedied may be rejected by the court.

The handling procedure in the court is initially conducted in writing, with a relatively numerous exchanges of correspondence between various authorities at national and local levels. The property owners affected and other right holders, such as holders of reindeer herding right that are concerned, are also given opportunity to be part in the legal process. The written process is usually ended with a main hearing that is held. The main hearing is open to the general public and does often include a sight visit of the place for the applied operations. After the main hearing the court normally issues a judgment.

An environmental permit normally includes a number of conditions for the mining operations concerning matters such as restrictions regarding emissions to water, handling and disposal of the mine waste, form and amount of the financial security that normally is required, limitation of atmospheric emissions, noise, vibrations, blasting and other disturbances. An environmental permit can be appealed to the Land and Environmental Court (if MPD is the first-instance permitting authority) or Land and Environmental Court of Appeal. Appeals may be filed by the parties affected by the decision, including not only the applicant and affected stakeholders but also by among others the Swedish Environmental Protection Agency, the County Administrative Board, the Municipality and environmental NGOs.

Public entities involved in the process

Applications for exploitation concessions under the Minerals Act are administered by the Mining Inspectorate. Regarding the exploitation concession procedure the County Administrative Board takes part in the evaluation of land use issues connected to the location of the extraction area applied for.

The application for an environmental permit required under the Environmental Code is handled by the Land and Environmental Court. In the permitting processes for environmental permit, several public entities may take part in the process, for instance the Swedish Environmental Protection Agency, the Swedish Agency for Marine and Water Management, the County Administrative Board and the Swedish Civil Contingencies Agency. Supervision of compliance with the environmental conditions in the environmental permit when the mine is operational is usually carried out by the County Administrative Board.

The local municipality is responsible for permissions required under with the Planning and Building Act.

Geographic areas covered by the permit

An exploitation concession is valid for a definite area, which is decided on the basis of the extent of the deposit, the purpose of the concession and other circumstances. The environmental permit is not necessarily limited to an exact area but regulates the allowed effects on the surroundings.

Rights and duties of licensee

Entitlement to extraction of concession minerals requires an exploitation concession under the Minerals Act. Extraction is defined in the Act as the extraction and utilisation of a concession mineral. An exploitation concession entitles the holder to carry out exploration

work and extraction above or below ground within the concession area. Extraction above ground, and the land needed for this purpose, as well as land outside the concession area, may only be utilised when the land has been designated for the purpose in a special land designation proceeding according to Chapter 9 of the Minerals Act.

An exploitation concession does not entail any obligation for the concession holder to commence mining. A granted exploitation concession is valid for 25 years. It can be prolonged for ten years at a time if work is performed on a regular basis on said area. If work is not performed on a regular basis on such area, the concession can still be prolonged for an additional period of 10 years if the work performed meets specific criteria set up in the Minerals Act or if it is otherwise motivated by the common interest that the mineral findings should be extracted in an effective manner. An application to prolong an exploitation concession should be filed no later than six months before the valid extraction concession expires.

To commence mining the concession holder also must require an environmental permit. The process to acquire an environmental permit is governed by the Environmental Code (1998:808). Through the permitting process, the Land and Environmental Court examines the environmental impact of the planned mining operation. The court also examines whether the planned mining activities are permissible according to the Environmental Code. If an environmental permit is decided, the permit regulates the holder's rights and obligations associated with mining operations.

Legal nature of the rights

Exploitation concessions can be granted for extraction on land (real property) belonging to any type of landowner, both private and public. The exploitation concession gives the holder an exclusive right to extract the deposit covered by the concession. A transfer of the exploitation concession can be permitted under the Minerals Act after application to the mining permitting authority (the Chief Mining Inspector). The permission can be granted if the future concession holder meets the conditions set forth in the Minerals Act. When an exploitation concession is terminated, the concession holder forfeits any rights to the land assigned to him at that time.

Transfer of an environmental permit is possible, provided that the new holder is taking over the permitted operation. According to the Ordinance of Environmentally Harmful Operations and Protection of Health (1998:899), the new holder must notify the supervisory authority about the transfer (the County Administrative Board).

Average length to get an extraction permit

According to statistics from the Mining Inspectorate the total period (from application date to final decision regarding exploitation concession) was on average 32 months last year (2018) and 36 months in 2017. The complete process for obtaining an environmental permit according to the Environmental Code takes approximately 3–6 years depending on the size of the mining operation and where it is to be carried out.

Main problems or major modifications related to extraction permitting

Long referral times, often the result of individual respondents requesting repeated deferrals, supplemental inquiries in several rounds and multiple appeals, have all been identified as the main causes of waiting times being sometimes years-long until the final decision is made (SveMin, 2012)

1.7. Court cases on permitting procedures

The procedural and institutional framework of court appeals

The general Swedish Court System consists of ordinary courts for civil and criminal cases, and a separate system of general administrative courts for the appeal of administrative decisions. The ordinary courts consist of:

- 48 district courts
- 6 courts of appeal, and the Supreme Court.

The general administrative courts consist of:

- 12 county administrative courts,
- 4 administrative courts of appeal, and the Supreme Administrative Court.

If an investor is dissatisfied with the final judgment made by the district court, it is possible in most cases to appeal to the court of appeal. The court of appeal is actually the second instance on issues relating to criminal cases, contentious cases and other judicial issues that have already been dealt with by a district court. However, in certain cases, 'leave to appeal' (permission) is required for the court of appeal to consider an appeal.

There are six courts of appeal in Sweden; Svea Court of Appeal in Stockholm, Göta Court of Appeal in Jönköping, the Scania and Blekinge Court of Appeal in Malmö, the Court of Appeal for Western Sweden in Gothenburg, the Court of Appeal for Southern Norrland in Sundsvall and the Court of Appeal for Northern Norrland in Umeå. Each of the six courts of appeal has a geographical catchment area - a court district - which can vary from covering five district courts to twenty for Svea Court of Appeal, which is the largest.

Land and Environment Courts

Since the introduction of the Environmental Code in 1999, Sweden has had a special system of environmental courts, today called Land and Environment Courts. In 2011 the Government implemented measures to simplify and coordinate environmental assessments and shorten lead times.

One of these measures was the formation of five Land and Environment courts and a Land and Environment Court of Appeal to replace the previous environmental courts, land tribunals and environmental court of appeal². As a result of the reform, there are now five Land and Environment courts, and one Land and Environment Court of Appeal. The five Land and Environment Courts are part of the District Courts in Nacka, Vänersborg, Växjö, Umeå and Östersund. The Land and Environmental Court of Appeal is part of Svea Court

² On 1 May 2011 the names of the courts were changed from "Environment Court of Appeal" to "Land and Environment Court of Appeal" (MÖD) and from "Environment Court" to "Land and Environment Court" (MMD).

of Appeal. The courts were established 2 May 2011 and replaced, among other things, earlier property courts and environment courts.

The processing of environmental cases, cases linked to the Planning and Building Act and property cases has been concentrated to the new courts. These courts are all divisions within the ordinary court system; five local courts and the Court of Appeal in Stockholm. This means that administrative decisions in environmental law are tried within the ordinary courts. The Land and Environment Courts will try appeals on administrative decisions by local and regional environmental authorities, and they will act as permit authorities. They will also handle civil disputes on land and environment cases, including claims for compensation and damages. Criminal cases are however not within the jurisdiction of the land and environment courts.

The Land and Environment courts decide on issues that demand scientific and technological assessments and balancing of interests that require expertise beyond the legal domain. Therefore, apart from lawyers, experts in environmental sciences sit as judges in the environmental courts. When deciding major cases, as a main rule, the Land and Environment courts consist of one professional judge, one environmental technician (technical judge) and two expert members (lay judges). Industry and national public authorities nominate the last two. Most cases are, however, decided by one professional judge together with one technical judge. The Land and Environment Court of Appeal is comprised of three professional judges and one technical judge. The presence of judges with a technical background is often helpful to ensure the court's understanding of cases which are often complicated from a technical perspective. It is likely that this system prevents misunderstandings in the Court's judgments. The background for their existence is partly historical since similar judges used to sit in the "water courts" which were the precursors to the current Land and Environment Courts. It is also important to note that the Land and Environment Courts have extensive responsibilities to ensure that the cases are appropriately investigated before they are heard which means that the Court may have to instruct parties to supplement the cases with additional information. The technical judges have an important role in that process.

In principle, all members of the courts have an equal vote. If in a case the outcome of the votes is equal, as general rule the chairman has a casting vote. The hierarchy in the route for appeals in environmental cases is:

- Municipal Environmental Board
- County Administrative Board
- Land and Environment Court (MMD)
- Land and Environment Court of Appeal (MÖD)
- Supreme Court (HD).

Most appeals of environmental decisions follow the described route, although the starting-point and terminus differ. Cases starting in a Land and Environment court can ultimately be brought to the Supreme Court. Cases starting in an authority can in most cases not be appealed beyond the Land and Environment Court of Appeal. Administrative decisions pursuant to the Environmental Code and the Planning and Building Act (PBL) are taken by the local or regional authorities, as well as by national public authorities, such as the Environmental Protection Agency, Chemicals Agency or the National Board of Health and Welfare. Permits are granted by local or regional authorities and – concerning water operations and larger industrial installations – by the land and environmental courts.

Another measure to simplify the environmental assessments was the concentration of assessment procedures for operations that require a permit to just 12 county administrative boards instead of the previous 21. This was an important reform measure

that has been called for by the business sector (Government Offices of Sweden, 2013). A further measure is the survey and analysis of the permitting process for quarrying operations, classed as "B operations". The survey/analysis has been performed by the National Council for Innovation and Quality in Public Administration, appointed by the Government in May 2011. The Council's work has involved the Land and Environment courts, municipalities and various agencies and resulted in a model for identifying and clearing bottlenecks in the environmental assessment procedure based on a systematic approach. Following on from the Council's work, the Västerbotten County Administrative Board has been tasked to continue developing the model so that it also covers the permitting of "A operations", which include mining activities, and to submit proposals for how environmental assessment can be improved. This task may be expanded to include counties other than Västerbotten. It is to be implemented over a two-year period and be reported to the Government at regular intervals (Government Offices of Sweden, 2013).

Most decisive and representative court judgements

In Sweden, there exist relevant court cases both in the metalliferous and in the industrial/construction minerals sector. For the former one, there are representative cases such as Nordic Iron Ores application for a new mine (Fe) in Blötberget or Boliden Minerals application for extension of the mine (Zn, Pb and Ag) in Garpenberg which are not analysed in this study (the suggestion to also include an analysis about these two cases was received from reviewers only at the end of the project).

In contrast, the court cases surveyed have to do with the Gotland area, as requested by some of the partners that provided feedback during the confection of this study. Besides the Bunge-Ducker case (analysed in the Annex of MINLEX's Final Report), another case relates to the company SMA minerals and the project to expand an existing quarry as described below.

Case No.: Sweden/Nacka Tingsrätt/M 463-08, Sweden/Svea Hovrätt/M 5375-14

Name of Court: Land and Environment Court of Appeal

Date of Judgment: 2018-09-11

Name of plaintiff (or appellant): Swedish Environmental Protection Agency, County Administrative Board of Gotland and several environmental NGOs.

Name of defendant: SMA Minerals

Judgement in favour of: Appellants.

Relevant stage of permitting: extraction - application to prolong and expand an existing quarry is still ongoing since 2008.

Piece of legislation on which the claim (or appeal) is based:

Case summary: The application to prolong and expand an existing quarry in the Gotland area in Sweden has been negotiated in court hearings 5 times. 4 times the verdict has been fully or partly (go ahead but add some further information) in favour of SMA. These verdicts have been appealed. The 5th hearing took place March 23-26 2015 in the court of appeal for the second time. March 26, 2015 the Swedish EPA proposes to the government to expand a nearby existing Natura 2000 area to cover the whole real estate owned by SMA (owning the land is a prerequisite for quarrying lime in Sweden).

May 5th 2015 the court of appeal decided to rest the case and not present a verdict relating to the interference of the government decision. August 31, 2015 the Swedish government

proposes to the European commission in line with the proposal from Swedish EPA (M2015/1508/Nm). The EC's decision is expected Nov 8 2016 on the government proposal. Quarrying operations ceased (lack of permit) in November 2015.

A second court hearing, continuing hearings March 23-26 2015, was held May 31 2016 in the Land and Environment Court of appeal regarding a limited part (area) of the permit application, the remaining (major area) part of the permit application is still resting. Recently the court case had a negative outcome in the Land and Environmental Court of appeal regarding mining deeper within a limited area in the existing open pit mine (partial verdict, the main verdict regarding the total permit application will follow when the legal conditions regarding the proposed Natura 2000 area are established). The reasoning behind the verdict was a risk of influence on the now proposed expansion of the Natura 2000 area Bästeträsk which just omit the open pit. The technical expert in the court opposed to the verdict, he approved SMA's application.

SMA has also challenged the Government decision (Nov. 2015) in the Supreme Administrative Court for violation of human rights, the right to fair trial and the right to property. No verdict yet. A letter with SMA complaints was sent to DG Environment in February 2016 regarding the Swedish government proposal to expand the above mentioned Natura 2000-area Bästeträsk. March 11 2016 a letter from DG Environment (Mr. Notaro) explained that, Natura 2000 sites are appointed on scientific criteria. It is up to the national (Swedish) authorities to withdraw an application if there are doubts on legal validity of the proposed Natura 2000 area. So far, Art. 2:3 of the Habitats Directive has been commented by either the Swedish government or DG Environment. There is no final verdict yet. The case was appealed to the Supreme Court. On 1 April 2019 the Supreme Court (HD) did not leave to appeal, so the decisions from the Land and Environment Court of Appeal stands (for Bunge-Ducker, case number: M 5431-14 and for SMA, case number: M 5375-14).

1.8. Success rates of exploration and extraction permits

The tables below show the numbers of applications (and granted applications) for exploration permits and extraction concessions **only for concession minerals** in Sweden for the period 2013 – 2015.

Exploration permits (applications and approved)

	2018		2017		2016	
	Applications	Approved	Applications	Approved	Applications	Approved
Exploration permits	166	152	227	178	139	119
Extended exploration permits	100	86	96	73	84	80
Exemptions from moratorium period	25	16	31	15	17	13

Source : Geological Survey of Sweden - Annual Report 2018

Extraction concessions (applications and approved)

	2018		2017		2016	
	Applications	Approved	Applications	Approved	Applications	Approved
Extraction concessions	2	4	2	6	4	6

Source : Geological Survey of Sweden - Annual Report 2018

	2018	2017	2016
Area for valid exploration permits (km ²)	10 034	9 427	8 956
Number of valid exploration permits	623	608	604
Number of companies with exploration permits	88	82	82
Number of private persons with exploration permits	19	21	23

Source : Geological Survey of Sweden - Annual Report 2018

The land area for Sweden is 447,435 km² (including lakes and rivers). In 2018 this means that 2.2% of Sweden is covered by exploration permits, mostly in the Västerbotten and Norrbotten counties in northern Sweden, but also in the Bergslagen area in the middle of Sweden.

1.9. EU legislation impacting permits and licenses for exploration and extraction

- 1) Does your country have any restrictive regulation on the private or legal entities performing the duties of an exploration or extraction concessioner, operator and/or holder of mineral rights as compared to the Services Directive (2006/123/EC)?

No.

- 2) Does any of your permitting documentation require the involvement/signature of a geologist or mining engineer? If yes, which are these permits? Does it require a BSc or MSc or PhD or chartered (certified) professional?

Yes. The Swedish Association for Mines, Mineral and Metal Producers (SveMin) recommend its member to follow the PERC Reporting Standard:

(https://www.sveamin.se/?file_download&file=3087).

Fennoscandian Association for Metals and Minerals Professionals (FAMMP) is a non-profit association for individuals working in the mining sector and having the professional qualification and work experience to be able to function as Competent Persons (Qualified Persons is used synonymously) for public reporting of exploration results, mineral resources and mineral reserves in accordance with the internationally recognized PERC (Pan European Reserves and Resources Reporting Committee) reporting standard, or another similarly CRIRSCO (Committee for

Mineral Reserves International Reporting Standards) based reporting standard. Other CRIRSCO standards, for example the JORC Code and NI 43-101 are accepted to be applicable, at least in Sweden.

Like the International Template, the PERC standard requires that a "Competent Person" should evaluate the quality of, and commenting on the technical and scientific documentation on which the report is based, as well as the results published in the company's public report on the company's exploration results, mineral resources and mineral reserves. Such documentation may be statements of mineral resources, mineral reserves, feasibility studies and project assessments.

There is no formal requirement that a Competent Person need to have a specific diploma degree. The PERC standard state that a "Competent Person" must be familiar with the mineral industry and must have a minimum of five years of relevant experience. "Relevant experience" must, along with other items, include experience with the type of deposit/object and project being reported. The key word "relevant" means that it is not always necessary for a person to have five years of experience in each and every type of deposit in order to act as a Competent Person, if that person has relevant experience in other deposit types. For example, a person with, e.g. 20 years' experience in estimating mineral resources, may not require five years specific experience in each and every mineralisation type (massive, disseminated, etc.). As a general guide, Competent Persons should be sufficiently clearly satisfied in their own minds as to be able to face their peers and demonstrate competence in the mineralisation type under consideration. If doubt exists, the person shall either seek opinions from appropriately experienced colleagues or shall decline to act as a Competent Person.

As a quality assessment, a Competent Person must be approved and registered by FAMMP. The approval and registration as a Competent Person are limited in time and need to be renewed through regular applications.

- 3) Do you have legislation on financial guarantees (with regard to the Extractive Waste Directive, Art. 14)? Is the cost calculation of this guarantee done by an independent third party?

Yes, A financial guarantee corresponding to the requirements in the EWD is required under the Environmental Code and is implemented as a condition in the environmental permit required to conduct mining activities. The cost calculation (size and form of the financial security) must be reviewed and approved by the Land and Environmental Court in connection with the court's issuing of the Environmental Permit. The operator shall in the application inform the court about the financial security that, according to an independent qualified assessment, is needed.

The government appointed a commission of inquiry in 2017 to analyze whether sufficient funds are set aside to ensure that mining activities do not hand over a damaged environment or financial commitment to the government and future generations. The commission of inquiry presented its proposals to the Government in 2018.

- 4) Is there a list of inert mine waste published in your country in accordance with Art. 1(3) of Comm. Dec. 2009/359/EC?

No.

- 5) Do you use the risk assessment of 2009/337/EC Commission Decision of 20 April 2009 on the definition of the criteria for the classification of waste facilities in

accordance with Annex III of Directive 2006/21/EC of the European Parliament and of the Council concerning the management of waste from extractive industries for abandoned sites as well?

The Swedish method for inventories and risk classification of contaminated land is complemented to cover specifics for extractive waste facilities and used for the inventories of abandoned and closed waste facilities according to article 20. These inventories are carried out by the county administrative boards.

- 6) Has your country applied the waiver of the Landfill Directive paragraph 3 of Art. 3: MS may declare at their own option, that the deposit of non-hazardous non-inert mine waste, to be defined by the committee established under Art. 17 of this Directive can be exempted from the provisions in Annex I, points 2, 3.1, 3.2 and 3.3 (location screening, multiple barriers, leachate collection)?

Waste covered by the extractive waste directive is exempted from the subject of the landfill directive (art. 2.4 EWD). In Sweden, waste covered by the Swedish Extractive waste ordinance is excluded from the scope of the Swedish landfill ordinance.

- 7) Does a mine operator have to prepare and submit both a general waste management plan and a mine waste management plan as well? To the same or separate authorities?

No. Only a extractive waste management plan according to the EWD. (67 § UtvavF)

- 8) Has your national legislation transposed the Accounting Directive (2013/34/EC), with special regards its Art. 41-48 on the extractive industry? Do these rules on financial reporting appear in the concession law or mining act either?

Yes, but not in the Minerals Act. Articles 41-46 in the Accounting Directive (2013/34/EC) is transposed in Sweden by provisions in the Reporting of Payments to Authorities Act (2015:812). Article 47 and 48 are provisions directed at the Commission.

- 9) Has your national legislation transposed the Transparency Directive (2004/109/EC, 2013/50/EU), especially Article on the extractive industry? Do these rules appear in the concession law or mining act either?

Yes, but not in the Minerals Act. Article 6 (on extractive industry) in the Transparency Directive (2013/50/EU) is transposed in Sweden by Chapter 16, Section 6 in the Securities Market Act (2007:528).

- 10) Does your competent authority ask for or check the CE marks of the exploration or extraction equipment when permitting or when having on-site inspections? Does the mining authority have a regulatory/supervision right in product safety/market surveillance in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance?

Not known by the respondent

- 11) Do you have national or regional guidance document or a piece of legislation specific to the Environmental Impact Assessment (EIA) on mineral extraction (incl. mineral processing, waste management, closure)? If yes, please provide link and/or text in English and/or in original language.

Yes, for several operations including mining there is guidance on environmental impact assessment:

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Hallbar-utveckling-i-miljobalken/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Hallbar-utveckling-i-miljobalken/Integrera-miljobedomning/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Befolkning-och-halsa/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Biologisk-mangfald/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Biologisk-mangfald/Artskydd/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Biologisk-mangfald/Ekosystemtjanster-i-miljobedomningar1/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Klimat/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljoaspekter-i-miljobedomning/Kumulativa-effekter/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Undersokning/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Betydande-miljopaverkan/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Undersokning/Andring-av-verksamhet-eller-atgard/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Samradsunderlag/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Avgransning-/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Miljokonskvensbeskrivningen-/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Alternativ-/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Nulage-och-framskrivet-nulage/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Kompetenskrav/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Underlag-kompensation/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Kungorelse/>

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Sektorslagstiftning1/>

There is also guidance to environmental impact assessment and sector specific legislation i.e. the mineral act:

<http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledning/Miljobedomningar/Specifik-miljobedomning/Sektorslagstiftning1/>

More sector specific guidance for mines will come during fall 2019 and next year.

- 12) Could you please specify that at which permitting stage (value chain stage, e.g. non-penetrative prospection, exploration, setting mining plot, approving technical operation plan, starting extraction) is a detailed EIA is required in your country?

When an operator applies for an exploration concession according to the mineral act or an environmental permit according to the environmental code an EIA is required. If a trial extraction of ore is supposed to take place an EIA is required in the application for environmental permit for trial extraction.

(additional comment from Ministry of Enterprise and Innovation: The level of details of the EIA increase for each step in the permitting process. The EIA in the

exploration concession is not as detailed as the one needed for applying for a environmental permit).

- 13) Does your country apply the option of Article 4(b) of the EIA Directive (2011/92/EU) („... for projects listed in Annex II, Member States shall determine whether the project shall be made subject to an assessment in accordance with Articles 5 to 10 ... through thresholds or criteria set by the Member State”) for mining projects? If yes, under what criteria?

No

- 14) Was there any case in your country when Article 10 of the EIA Directive (2011/92/EU) was applied („limitations ... with regard to commercial and industrial confidentiality, including intellectual property, and the safeguarding of the public interest”) ? Which were these exclusions, if any?

Not to our knowledge, possibly parts of applications due to industrial confidentiality.

- 15) Do competent authorities in your country apply the IPPC permit and the Extractive Waste BREF for mining under the scope of the Industrial Emissions Directive?

No

- 16) Do you have national BREF(s) (Best Available Technique Reference Document(s)) specific to the whole (or stages or subsectors) minerals extractive sector?

No