Environmental Product Declaration for aggregates from the stationary crushing plant Ramnaslätt

According to EN 15804:2012+A1:2013, ISO 14044 and ISO 14025
Program operator: International EPD® System
Declaration owner: NCC Industry AB

Reg. no. S-P-00843 UN CPC 15320 Date 06/11/2017 Valid until 06/11/2022

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The verifier and the program operator do not make any claim nor have any responsibility of the legality of the product, its production process or its supply chain.

This is a "cradle to gate" EPD based on an LCA model described in a background report. The aggregates declared are produced in a stationary crushing plant. The declared stationary crushing plant is Ramnaslätt in Borås, a medium-sized stationary crushing plant of NCC Industry in Sweden.

A higher version of the EPD has been issued. The amendment was made because the environmental impact differs more than 10% between production year 2014 and 2016. This is mainly due to a higher consumption of electricity for transport belts, sieves and crushers and a lower consumption of diesel in dumpers and excavators.

The aggregates declared are blasted rock, 0/250 mm, 0/150 mm, 0/90 mm, 0/32 mm, 32/63 mm, 16/32 mm, 16/22 mm, 11/16 mm, 8/16 mm, 8/11 mm, 5/8mm, 2/8 mm, 2/5 mm, 0/16 mm, 0/8 mm, 0/5 mm, 0/2 mm, washed 32/63 mm and washed 16/32 mm. The aggregates consist of granite.

EPD INFORMATION

Declared unit:	1 ton (1000 kg) of aggregate
RSL:	Not specified
PCR:	Construction products and construction services 2012:01 Version 2.2, Date 2017-05-30
Program operator:	The International EPD® System operated by EPD International AB Box 210 60 SE-100 31 Stockholm Sweden info@environdec.com

The aggregates declared in this EPD are produced at the stationary crushing plant Ramnaslätt owned by NCC Industry AB in Sweden. The EPD is representative for aggregates produced at Ramnaslätt. The aggregates declared are visualized in Figure 1.

The plant is located in Borås, Sweden, see Figure 2. It is a plant of medium size which produces around 470 000 tons of aggregates per year. The specific electricity and diesel consumption per ton is 23% lower and 20% higher respectively, at Ramnaslätt compared to the average of all of NCC Industry's stationary crushing plants in Sweden (data for 2013). NCC Industry operates an additional 14 stationary crushing plants and 8 plants utilizing both stationary and mobile crushing equipment in Sweden.

The intended use of the aggregates declared is as filling material in civil engineering and construction projects and as ballast in concrete and asphalt. The aggregates do not contain any substances of very high concern (SVHC) according to REACH. The aggregates do not emit any dangerous substances during the use stage. The activity index of the material is below the national limit. All materials are certified according to SS-EN 12620, SS-EN 13043, SS-EN 13242, or SS-EN 13450. Aggregates are produced in various sizes; from blasted rock to fine 0/2 mm material (grains between 0 and 2 mm in diameter).

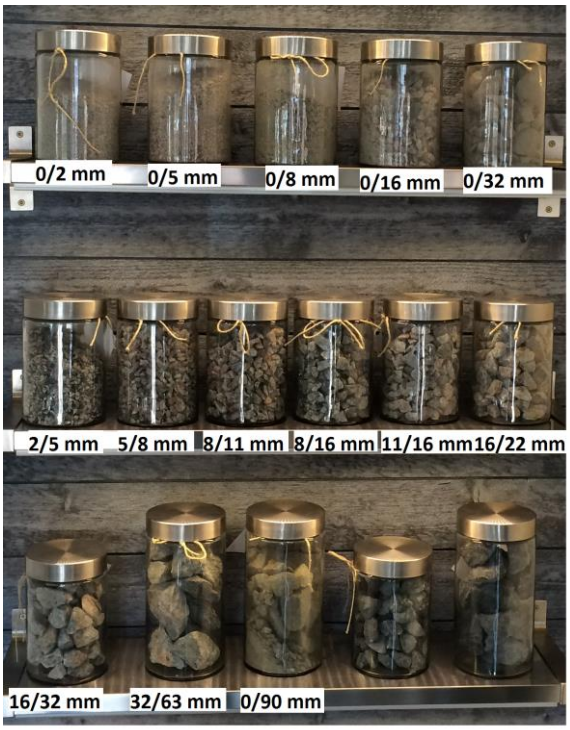

Figure 1: Photo of the aggregates declared in this EPD.

The aggregates are manufactured according to relevant standards, mainly described in SS-EN standards and AMA Anläggning 13. The complete list of standards can be found in References.

Figure 2: Map showing the geographical location and an aerial view of the declared site Ramnaslätt.

Figure 3 illustrates the production process of aggregates in the stationary crushing plant Ramnaslätt.

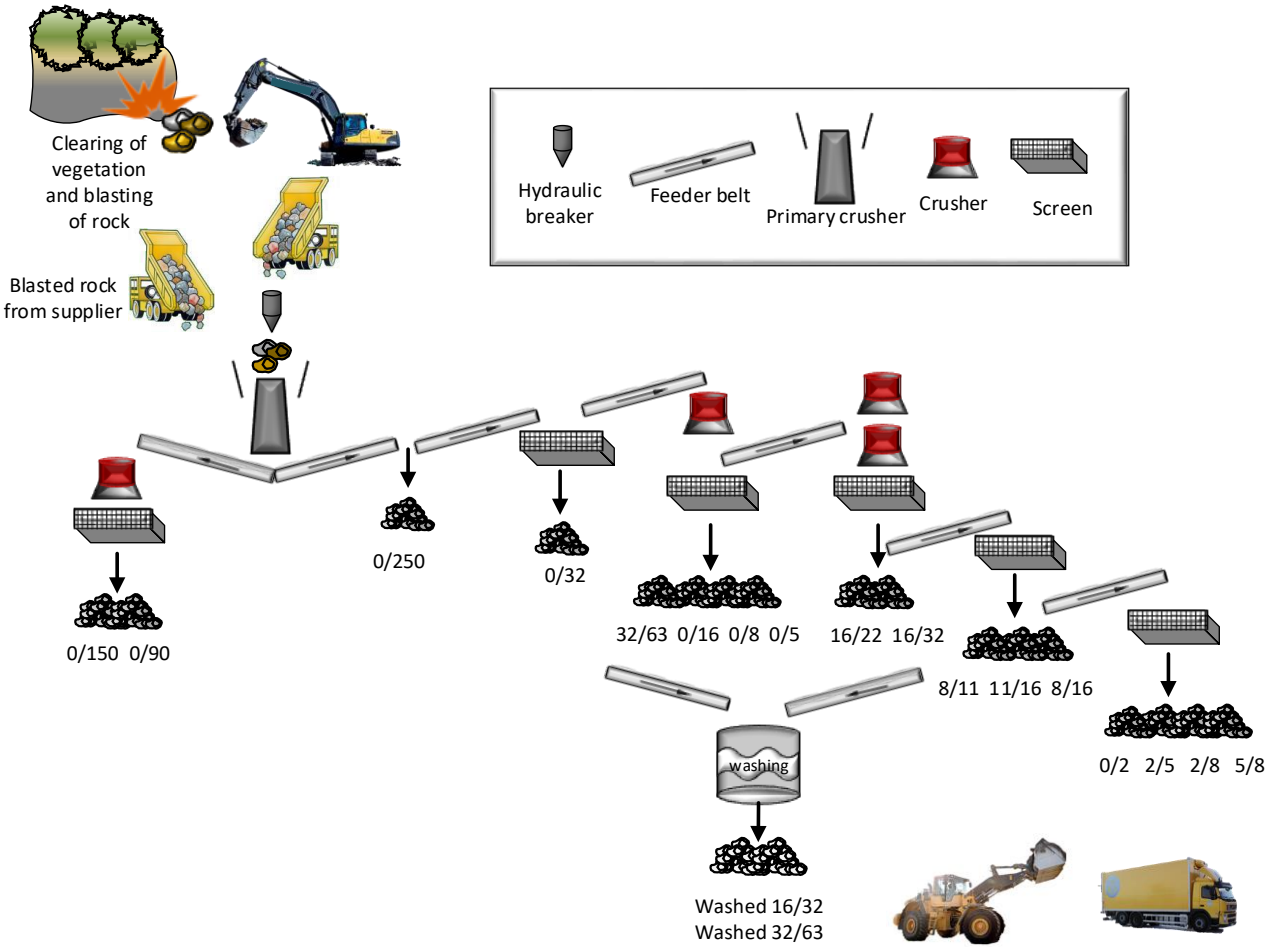

Figure 3: Production process of aggregates in the stationary crushing plant Ramnaslätt.

The first step in the production process is to remove the top soil and uncover the hard rock by an excavator. When the hard rock is uncovered, a number of holes are drilled, filled with explosives and detonated.

The blasted rock is collected by an excavator loading a dumper truck, which transports the material to the primary crusher. If there are rocks too large for the crusher, they are broken down by a hydraulic breaker. Some blasted rock is taken from another site (Hedared), close to Ramnaslätt.

The primary crusher produces a material smaller than 250 mm (0/250 mm), which is taken to a stockpile by a conveyor belt where it is stored. A tunnel feeder transports part of the 0/250 mm material to a secondary crusher.

The secondary crusher produces 0/90 mm or 0/150 mm depending on the screen used, *or* further refines it to macadam. In the latter case the material is further transported by a conveyor belt to another screen where rocks smaller than 32 mm are removed and transported by a conveyor belt to a stockpile. The remaining stone material (32/250 mm) is transported by a conveyor belt to a crusher and a screen that produces the materials 32/63 mm, 0/16 mm, 0/8 mm or 0/5 mm. The 32/55 mm is transported by a conveyor belt to one of two crushers (about 50% to each) and then screened in three steps. The first screen produces 16/22 mm or 16/32 mm, the second screen produces 8/11 mm and 11/16 mm and the last screen produces 0/2 mm, 2/5 mm and 5/8 mm. All these materials are stored in silos.

The coarse materials (0/150 mm, 0/90 mm, 0/32 mm) are placed in stockpiles beneath the conveyor belts beside the screens until they are loaded on trucks. The finer materials are transported by a wheel loader from the silos to stockpiles continuously. To decrease dusting in the quarry, the roads are watered by a former tanktruck, and the conveyor belts are watered by spray nozzles and scraped to keep them clean. The gap between feeders and crushers is built in and funnels are used at the conveyors for 0/32 mm and 0/16 mm.

In some cases the material is washed (aggregates of 16/32 mm and 32/63 mm). A wheel loader feeds the material into a washing screen. There it is rinsed with water pumped from a sedimentation pond. Washed away fine particles sediments in a sedimentation basin placed underneath the screen and the sediment is removed by an excavator 1-2 times per year. The sediment is used within the quarry for rehabilitation of slopes etc.

A wheel loader transports the aggregates from stockpiles to trucks which leave the site.

1. Declared Unit

The declared unit is 1 ton (1000 kg) of aggregate. Results are declared for 1 ton each of the aggregate fractions that are produced at the plant.

2. System boundary

The EPD covers the cradle to gate stage, because other stages are dependent on particular scenarios and are better developed for specific building or construction works.

The EPD declares aggregates manufactured in a medium-sized stationary crushing plant. The geographical scope is Sweden. All production processes to manufacture the aggregates are included according to the PCR. The declared modules are shown in Figure 4.

Upstream	Core		Downstream													Other environmental information
Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
Raw material supply	Transport	Manufacturing	Transport	Manufacturing	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Future reuse, recycling or energy recovery potentials
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

Figure 4: The system boundaries of the LCA. Modules of the production life cycle included in the EPD (X = declared module; MND = module not declared).

3. Estimates and assumptions

The primary data was collected by the production site in 2016 and is reported per ton (1000 kg) of aggregates, except for the washed 16/32 which was not produced in 2016 so the primary data for washed 16/32 is for the 2014 production year.

For purchased blasted rock, supplier specific data is applied. For all other materials, general datasets from GaBi 8 are used. A general truck dataset is used for transport of materials. For the transport of aggregates in the plant site, a general dataset for diesel combustion in construction machines is used.

Green electricity from Vattenfall (100% Water power with EPD) is used by crushers and screens in the production process (module A3). The emission factor used in the model for this electricity is 4,3 g CO_2e/MJ, because this a general dataset for Swedish water power in the GaBi database. However, the actual emission factor for the Vattenfall electricity is 2,8 g CO2e/MJ.

Based on experience, it is estimated that approximately 3% of the extracted granite is wasted during the production process and ends up as waste rock. Out of this waste rock, approximately 5% ends up as dust and 95 % is re-used on the site for repair of roads etc. The waste treatment for the waste materials is summarized in Table A.

Table A: Waste treatment

Material	Waste treatment
Waste rock	95% re-use, 5% dust emission (PM10)
Sediment	100% landfill
Waste water	100% municipal wastewater treatment

4. Allocation

For all refinery products, allocation by mass and net calorific value is applied.

Two allocation rules for upstream data are used: 1. the raw material (crude oil) consumption of the respective stages, is allocated by energy (mass of the product * lower calorific value of the product); and 2. the energy consumption (thermal energy, steam, electricity) of a process is allocated to the product according to the share of the throughput of the stage (mass allocation).

Specific information on allocation within each background dataset is available in the corresponding GaBi 8 dataset documentation.

The manufacturing process does not deliver any by-products. No allocation has been made in the primary data and the applied software model does not contain any foreground allocation.

5. Cut-off criteria

In the assessment, more than 98% of the total mass input and output and all the primary energy used for the manufacturing process are included using GaBi 8 datasets. The cut-off criterion is 1% of the renewable and non-renewable primary energy usage, 1% of the total mass input and 1% of the total mass output of the manufacture process (according to the EN 15804 standard).

Two cut-offs have been made. One cut-off is the groundwater used to spray conveyor belts. This amount is judged by the site manager to be smaller than 1% of the total input mass used in the manufacture. The other cut-off is the sediment from the manufacture of blasted rock at the supplier Hedared. The amount of sediment is judged to be less than 1% of the total mass output from the manufacture. It is judged that these cut-offs does not influence the result.

6. Background data

For life cycle modelling the software system for Life Cycle Engineering, developed by thinkstep AG, is applied. The GaBi 8 database contains consistent and documented datasets which are available in the online GaBi documentation. The selected method for calculations is CML 2001 (the database updated in 2013).

Explanatory material is given in a background report to this EPD. For more information visit www.ncc.se/epd.

7. Data quality

Overall the data quality can be described as good.

The model is based on site specific data provided by NCC Industry for the year 2016. Background data is geographically representative of the production site location, and is less than 5 years old.

8. Comparability

EPD of construction products may not be comparable if they do not comply with EN 15804. Neither may EPD within the same product category from different programs be comparable.

A comparison of EPD is only possible if all the data sets to be compared are created according to ISO 14025 and EN 15804, and the building context, particularly the product-specific characteristics of performance, is taken into account.

ENVIRONMENTAL PERFORMANCE RELATED INFORMATION

The results of the life cycle assessment of 1 ton (1000 kg) of aggregates of various sizes are given in Table 1 (potential environmental impact), Table 2 (resource use) and Table 3 (output flows and waste categories). A sensitivity check of the cut-offs has been performed and the cut-offs do not influence the final result.

The main part of the impact for the categories global warming potential, acidification potential, eutrophication potential and photochemical ozone creation potential originates from the combustion of diesel in machines handling the aggregates in the manufacture. For the category ozone depletion potential, the main part of the impact originates from the production of explosives used for blasting. For the washed aggregates however, the main part originates from the treatment of the water used. The contribution to ODP originates from the production of electricity used in the water treatment plant. For the category depletion of abiotic resources (elements), the main part of the impact originates from the production of electricity used by the crushes and screens. For the washed aggregates, a large part also originates from the treatment of water used because of the electricity used in the water treatment process. The use of granite does not have any impact on the ADPE since granite is considered to be an abundant resource. For the category depletion of abiotic resources (fossil), the main part of the impact originates from the production of diesel used by the machines. In general, production of the washed aggregates generates the largest potential environmental impact in all categories.

For the category use of renewable primary energy, the main part of the use originates from the production of electricity used by the crushers and screens. For the category use of non-renewable primary energy, the main part of the use originates from the production of diesel used by the machines. Also a relatively large part of the use originates from the production of explosives. The net freshwater use is negative for the washed aggregates. This is because rain water is used for the washing, and this rain water goes to the municipal wastewater treatment and comes back to nature as clean water. Since rain water is not considered a blue water use, the net impact is negative since the rainwater has been cleaned before going back to nature. Most resources are used in the production of the washed aggregates.

The main part of the radioactive waste originates from production of electricity used in the production of the explosives used. For the washed aggregates, the contribution to radioactive waste is equally high for the treatment of water used because of the electricity used in the water treatment plant. The hazardous waste disposed originates mainly from the production of diesel used in the machines. The non-hazardous waste disposed originates mainly from the landfilling of sediment produced in the manufacture process. For the washed aggregates, the main part originates from the wastewater treatment of water used for washing. Most hazardous waste is generated in the production of aggregates 32/63 mm, 0/16 mm, 0/8 mm, 0/5 mm, 16/22 mm, 16/32 mm, 8/11 mm, 11/16 mm, 8/16 mm, 0/2 mm, 2/5 mm, 2/8 mm and 5/8 mm. This originates from the production of diesel used in the production of the aggregates. Most non-hazardous waste and radioactive waste is generated in the production of the washed aggregates.

Table 1: Results of the LCA – Potential environmental impact for 1 ton (1000 kg) of product

Potential environmental impact		Modules A1-A3									
Parameter	Unit	Product group 1	Product group 2	Product group 3	Product group 4	Product group 5	Product group 6	Product group 7	Product group 8	Product group 9	Product group 10
		Blasted rock	0/250 mm	0/150 mm, 0/90 mm	0/32 mm	32/63 mm, 0/16 mm, 0/8 mm, 0/5 mm	16/22 mm, 16/32 mm	8/11 mm, 11/16 mm, 8/16 mm	0/2 mm, 2/5 mm, 2/8 mm, 5/8 mm	Washed 32/63 mm	Washed 16/32 mm
Global warming potential (GWP_{100})	kg CO_2 eq	1,63	1,98	2,15	2,02	2,24	2,25	2,26	2,27	3,49	3,84
Ozone depletion potential (ODP)	kg CFC 11 eq	3,21E-011	3,68E-011	3,69E-011	3,68E-011	3,69E-011	3,69E-011	3,69E-011	3,69E-011	3,9E-011	3,83E-011
Acidification potential of land and water (AP)	kg SO_2 eq	0,0119	0,0146	0,0149	0,0149	0,0168	0,0168	0,0168	0,0168	0,0181	0,0214
Eutrophication potential (EP)	kg PO_4^{3-} eq	0,003	0,00363	0,00371	0,0037	0,00411	0,00411	0,00411	0,00411	0,00598	0,0067
Photochemical ozone creation potential (POCP)	kg C_2H_2 eq	0,00106	0,00129	0,00133	0,00132	0,00151	0,00151	0,00151	0,00151	0,00158	0,0019
Depletion of abiotic resources (elements) (ADPE)	kg Sb eq	1,5E-007	2,68E-007	1,55E-006	3,56E-007	5,41E-007	6,48E-007	7,08E-007	7,93E-007	6,57E-007	6,56E-007
Depletion of abiotic resources (fossil) (ADPF)	MJ net calorific value	18,6	22,6	23,3	23,1	26	26	26	26	26,4	31,4

Table 2: Results of the LCA - Resource use for 1 ton (1000 kg) of product

Use of resources		Modules A1-A3									
Parameter	Unit	Product group 1	Product group 2	Product group 3	Product group 4	Product group 5	Product group 6	Product group 7	Product group 8	Product group 9	Product group 10
		Blasted rock	0/250 mm	0/150 mm, 0/90 mm	0/32 mm	32/63 mm, 0/16 mm, 0/8 mm, 0/5 mm	16/22 mm, 16/32 mm	8/11 mm, 11/16 mm, 8/16 mm	0/2 mm, 2/5 mm, 2/8 mm, 5/8 mm	Washed 32/63 mm	Washed 16/32 mm
Use of renewable primary energy (PERE)	MJ, net calorific value	0,958	4,14	47,1	7,01	12,8	16,4	18,5	21,3	19,9	19,2
Use of renewable primary energy resources used as raw materials (PERM)	MJ, net calorific value	0	0	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources (PERT)	MJ, net calorific value	0,958	4,14	47,1	7,01	12,8	16,4	18,5	21,3	19,9	19,2
Use of non-renewable primary energy (PENRE)	MJ, net calorific value	18,9	23	23,7	23,5	26,4	26,4	26,4	26,4	27,1	32,1
Use of non-renewable primary energy resources used as raw materials (PENRM)	MJ, net calorific value	0	0	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT)	MJ, net calorific value	18,9	23	23,7	23,5	26,4	26,4	26,4	26,4	27,1	32,1
Use of secondary material (SM)	kg	0	0	0	0	0	0	0	0	0	0
Use of renewable secondary fuels (RSF)	MJ, net calorific value	0	0	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF)	MJ, net calorific value	0	0	0	0	0	0	0	0	0	0
Use of net fresh water (FW)	m^3	0,00264	0,0107	0,12	0,018	0,0327	0,0418	0,0469	0,0542	-0,197*	-0,199*

* Results are negative because rain water is treated in a municipal sewage plant. The water treatment process is therefore “giving back” clean water to nature (see chapter 5.2).

Table 3: Results of the LCA - Output flows and waste categories for 1 ton (1000 kg) of product

Waste		Modules A1-A3									
Parameter	Unit	Product group 1	Product group 2	Product group 3	Product group 4	Product group 5	Product group 6	Product group 7	Product group 8	Product group 9	Product group 10
		Blasted rock	0/250 mm	0/150 mm, 0/90 mm	0/32 mm	32/63 mm, 0/16 mm, 0/8 mm, 0/5 mm	16/22 mm, 16/32 mm	8/11 mm, 11/16 mm, 8/16 mm	0/2 mm, 2/5 mm, 2/8 mm, 5/8 mm	Washed 32/63 mm	Washed 16/32 mm
Hazardous waste disposed (HWD)	kg	7,66E-007	9,51E-007	9,93E-007	9,78E-007	1,13E-006	1,13E-006	1,13E-006	1,13E-006	1,14E-006	1,41E-006
Non-hazardous waste disposed (NHWD)	kg	0,0839	0,085	0,0938	0,0856	0,087	0,0877	0,0881	0,0887	0,462	0,462
Radioactive waste disposed (RWD)	kg	0,000135	0,000156	0,000161	0,000157	0,000162	0,000162	0,000162	0,000162	0,00029	0,000294

ADDITIONAL ENVIRONMENTAL INFORMATION

In Sweden, aggregates are produced from natural sources mainly extracted from quarries and gravel pits. Aggregates are important in building the future society since aggregates is a core building material in homes, offices, public buildings and infrastructure. To build a house for a household requires about 40 tons of aggregates and the corresponding amount for the construction of 1 km of motorway is 64 000 tons.

Aggregates are the main raw material extracted in Sweden, besides water. The Swedish production in 2014 was 77 million tons. Another ~10 million tons of excavated rock from tunnels, shafts etc. shall be added to this. This means that we consume about 8-9 tons of aggregates per capita and year in Sweden. The average yearly European demand is about 5 tons per capita.

The aggregates might be reused many times through recycling. Recycling is a key issue in resource efficiency and circular economy and at many of our sites we recycle aggregates, concrete, bricks and different soils. Recycled materials can then be used again. In other sites operated by NCC Recycling we recycle all kinds of construction and demolition wastes. In the end of life, aggregates are usually re-used in other construction projects, e.g. in roads and as ballast in concrete.

All quarries and gravel pits are operated according to a given permit with different conditions that has to be fulfilled. Those conditions might regulate e.g. noise, vibrations, dust, emissions to water and air, and rehabilitation of the quarry afterwards.

An inventory of the nature in the future expansion area of the Ramnaslätt quarry has been done. The site can be summarized as a common landscape with mostly low nature values. There are no unique nature values in expansion area; however there is an elm with a high nature value. After the quarrying at the site has ended, the municipality plans to use the area as industrial land. The site is in direct proximity of other industrial land.

VERIFICATION DETAILS

CEN standard EN 15804 served as the core PCR	
PCR:	PCR 2012:01 Construction products and Construction services, Version 2.2, 2017-05-30
PCR review was conducted by:	The Technical Committee of the International EPD® System. Chair: Massimo Marino Contact via info@environdec.com.
Independent verification of the declaration and data, according to ISO 14025:	□ EPD process certification (Internal) ☒ EPD verification (External)
Third party verifier:	Carl-Otto Nevén (carlotto.neven@bredband.net)
Accredited or approved by:	The International EPD® System

REFERENCES

AMA Anläggning 13
General specifications of material and workmanship of civil engineering works, Svensk Byggtjänst, 2011

Boverket 1980
Svensk Bygg Norm - SBN 80 1980 - Utdrag för OVK. Kap 31:143 PFS 1983:2.

CEN/TR 15941
Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data; CEN/TR 15941:2010

EN 15804
EN 15804:2012+A1:2013: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

GaBi 8 2017
GaBi 8 2017: thinkstep AG; GaBi 8: Software-System and Database for Life Cycle Engineering. Copyright, TM. Stuttgart, Leinfelden- Echterdingen, 1992-2017.

GPI
General Programme Instructions for the international EPD® system, Version 2.01, 2013

ISO 14040
EN ISO 14040:2009-11 Environmental management - Life cycle assessment - Principles and framework

MKB Ramnaslätt
Ansökan om tillstånd enligt Miljöbalken för fortsatt och utvidgad täkt av berg på fastigheten Viared 7:2 M fl (`Ramnaslätt´), Borås Stad – Miljökonsekvensbeskrivning. Täkt & Landskap, Lars Wikström, 2013

SS-EN 12620 2002+A1:2008
Aggregates for concrete

SS-EN 13242 2002+A1:2007
Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

VattenEl
Miljödeklaration för vattenel med EPD, 100 %
Waterpower: VattenEl with Environmental Product Declaration, Vattenfall 2016

Background Report
EPD for aggregates from the stationary crushing plant Ramnaslätt, NCC Industry AB 2016, amendment 2017

Council directive 2013
Council Directive 2013/59/EURATOM of 5 December 2013. Official journal of the European Union 17.1.2014.

CPR
Regulation (EU) No 305/2011 of the European parliament and of the council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC

EPD® SYSTEM
The International EPD® System, EPD International Ltd., Stockholm Sweden, http://www.environdec.com/

GaBi 8 2017B
GaBi 8 2017B: GaBi 8: Documentation of GaBi 8: Software-System and Database for Life Cycle Engineering. Copyright, TM. Stuttgart, Leinfelden-Echterdingen, 1992-2017. http://documentation.gabi-software.com/

ISO 14025
DIN EN ISO 14025:2014-02: Environmental labels and declarations — Type III environmental declarations — Principles and procedures

ISO 14044
EN ISO 14044:2006-10 Environmental management - Life cycle assessment - Requirements and guidelines

PCR
Product Group Classification: Multiple UN CPC Codes, Construction Products And Construction Services 2012:01, Version 2.2, 2017-05-30

SS-EN 13043 2002/AC:2006
Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

SS-EN 13450:2002/AC 2004
Aggregates for railway

ABOUT THE EPD

This environmental product declaration (EPD) describes, from a lifecycle perspective, the total environmental impact of aggregates produced by NCC Industry in a stationary crushing plant.

The EPD is drawn up in accordance with Product Category Rules (PCR) 2012:01 for Construction products and construction services. The program operator is the International EPD® System (see www.environdec.com for more information). EPDs within the same product category but from different programs may not be comparable unless EN 15804 compliant where relevant. EPD of construction products may not be comparable if they do not comply with EN 15804.

The aim of this EPD is that it should provide objective and reliable information on the environmental impact of the production of aggregates by NCC Industry in a stationary crushing plant.

This EPD is developed by NCC. It is certified by Carl-Otto Nevén and the certification is valid for five years (after which it can be revised and reissued). NCC Industry AB is the declaration owner.

As this EPD is based on data for production of aggregates at the stationary crushing plant Ramnaslätt owned by NCC Industry, the results might not be representative for aggregates produced at other companies' stationary crushing plants.

ABOUT NCC

NCC is one of the leading construction and property development companies in the Nordic region, with sales of SEK 53 billion in 2016 and approximately 16 800 employees. With the Nordic region as its home market, NCC is active throughout the value chain – developing commercial properties and constructing housing, offices, industrial facilities and public buildings, roads, civil engineering structures and other types of infrastructure. NCC also offers input materials used in construction and accounts for paving and road services.

NCC's vision is to renew our industry and provide superior sustainable solutions. NCC aims to be the leading society builder of sustainable environments and will proactively develop new businesses in line with this.

NCC works to reduce both our own and our customers' environmental impact and continues to further refine our offerings with additional products and solutions for sustainability. In terms of the environment, this entails that NCC, at every step of the supply chain, is to offer resource and energy-efficient products and solutions to help our customers reduce their environmental impact and to operate more sustainably. NCC has an ISO 14001 certificate.

NCC's sustainability work is based on a holistic approach with all three dimensions of sustainability – social, environmental and economical. In NCC's new sustainability framework, our focus areas with regards to sustainability are defined; Climate and Energy, Materials & Waste, Social Inclusion, Health & Safety, Compliance and Portfolio Performance. Our sustainability strategy includes the aim of being both a leader and a pioneer in these areas.

NCC reports on its sustainability progress each year and the report has been included in NCC's Annual Report since 2010. NCC applies G4, the voluntary guidelines of the Global Reporting Initiative (GRI) for the reporting of sustainability information. In addition to GRI, NCC also reports the Group's emission of greenhouse gases to the CDP each year. NCC is a member in BSCI (Business Social Compliance Initiative), which is the broadest business-driven platform for the improvement of social compliance in the global supply chain, and has been a member of the UN Global Compact since 2010. The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 defined and universally accepted principles in the areas of human rights, labour, environment and anti-corruption.

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