



Nordic Ecolabelling of

Vehicle wash installations

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Nordic Ecolabelling

In November 1989, the Nordic Council of Ministers adopted a measure to implement an official voluntary ecolabelling scheme, the Swan. The organizations/companies listed below administer the Nordic Ecolabelling schemes on assignment from their national governments.

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This document is a translation of an original in Norwegian. In case of dispute, the original document should be taken as authoritative.

Nordic Ecolabelling of vehicle wash installations

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What is a Nordic Ecolabelled vehicle wash installation?	1
Why choose the Nordic Ecolabel?	1
What can carry the Nordic Ecolabel?	2
How to apply	2
What are the requirements of Nordic Ecolabelling?	4
1 The vehicle wash installation	5
2 Chemicals.....	12
3 Total score	13
4 Environmental management and regulatory requirements	14
Marketing	17
Design of the Nordic Ecolabel	17
Follow-up inspections	18
How long is a licence valid?	18
New criteria.....	18

Appendices

1	Declarations regarding sludge tanker trucks (O6)
2	Overview of chemicals (O11)
3a	Chemicals that are not Nordic Ecolabelled (O12)
3b	Declaration regarding chemicals that are not Nordic Ecolabelled (O12)
4	Report for self-assessment (M2) and annual check (M4)
5	Report – initial sampling (M3)
6	Marketing of Nordic Ecolabelled car wash installations
7	Analysis and control

What is a Nordic Ecolabelled vehicle wash installation?

Nordic Ecolabelling of vehicle wash installations focus on the impact a vehicle wash has on the environment. Large amount of water and chemicals are used in the washing process.

The aim of these criteria is to stimulate the development of resource-efficient and effective vehicle wash installations without hazardous discharges to air, soil or water. For that reason the requirements in the criteria concerns the following areas:

- The physical conditions of the installation
- Water consumption
- Chemical handling
- Discharge control
- Waste management
- Maintenance and service

Why choose the Nordic Ecolabel?

- The vehicle wash installation may be marketed by the Swan trademark. The Nordic Ecolabel, the Swan, is a very well-known and well reputed trademark in the Nordic region.
- The Nordic Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers, suppliers and retailers.
- A company with less impact on the environment has the opportunity to reduce cost by using less water and chemicals and also minimize packaging and waste.
- Environmentally adapted operations prepare the manufacturer for future environmental legislation.
- Environmental issues are complex. It can take a long time and extensive resources to gain an understanding of a specific area. Nordic Ecolabelling can be seen as a guide in this work.
- The Nordic Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Ecolabel?

The criteria document covers commercial automatic and/or manual, pre-programmed wash installations for passenger cars and automatic wash installations for buses and trucks.

Passenger car means a vehicle designed for the transportation of no more than 9 people including the driver.

The term truck denotes a heavy truck larger than 3.5 tonnes, with or without trailer. The term bus denotes a vehicle that is registered as a bus for more than 9 persons.

Installations that are intended for use in other services, such as reconditioning and repairs, are not covered by the criteria. Vehicle wash installations for tramway traffic are not encompassed by the criteria.

The licensee of the Nordic Ecolabelled vehicle wash installation may be the owner of the wash installation (such as a petrol station) or a supplier of wash installations or purification facilities. The licensee is always responsible for ensuring that the vehicle wash installation is operating according to the criteria.

How to apply

The criteria for vehicle wash installations comprise a combination of obligatory requirements and point score requirements. The obligatory requirements, marked with the letter O and a number, must always be fulfilled.

The letter P and a number distinguish point score requirements. Each requirement of this type gives a point score. These scores are then totalled. A minimum total score must be achieved to fulfil the licence constraints.

Environmental and quality management requirements are marked with the letter M and a number, and are also obligatory.

The requirements section can also be used as a checklist. Each requirement is followed by two checkboxes – Yes and No – to indicate whether the requirement is met.

Icons in the text

The text describes how the applicant shall demonstrate fulfilment of each requirement. There are also icons in the text to make this clearer. These icons are:

 Enclose

 The requirement is checked on site

Application

The application shall be sent to Nordic Ecolabelling in the country in which the vehicle wash installation is situated. See page 2 for addresses. The application documents comprise an application form and documentation demonstrating fulfilment of the requirements (specified in the criteria). In addition an application fee has to be paid.

Further information and assistance may be available. Visit the Web site of the national ecolabelling body for more information.

On-site inspection

In connection with handling of the application, Nordic Ecolabelling performs an on-site inspection to ensure adherence to the requirements.

Nordic Ecolabelling reviews the application and checks the working procedures, chemical lists and similar documents submitted by the applicant. For such an inspection, data used for calculations, original copies of submitted certificates, test records, purchase statistics, and similar documents that support the application must be available for examination.

Costs

An application fee is charged to companies applying for a licence. There is an additional annual fee based on the turnover of the Nordic Ecolabelled vehicle wash installation.

Enquiries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 2 for addresses.

What are the requirements of Nordic Ecolabelling?

For a vehicle wash installation to be awarded a Nordic Ecolabel licence:

- All obligatory requirements regarding the vehicle wash installation (chapter 1) and the chemicals (chapter 2) must be fulfilled.
- The vehicle wash installation must achieve a minimum point score of 5 out of a maximum 19. Total scores are recorded in chapter 3.
- All requirements regarding environmental management must be fulfilled (chapter 4)
- Nordic Ecolabelling must inspect the vehicle wash installation on-site.

Some of the requirements are point scores and makes it possible for the installation company to choose the most relevant steps to take. The higher the score, the better for the environment.

Documentation of test results

When documentation is required in form of test results, the test method used for testing of all parameters must be stated. Requirements to test methods and test laboratory are seen in appendix 7.

1 The vehicle wash installation

Obligatory requirements

O1 Description of the installation

A brief description shall be provided of the installation including the following information:

- the type of vehicle wash installation (manual and/or automatic wash installation, dimensioned for cars or buses etc.)
- the type of treatment system
- the number of vehicles for which the wash installation is dimensioned
- the number of vehicles washed per year (information provided in the initial sampling)

Description of the above requirements.

O2 Dimensioning of the treatment equipment/system

Waste water from the wash installation (including overflow water) must be treated with the aid of treatment technology that is suited to the method of washing and the volume of washes.

A description/account from the supplier of the treatment equipment of the way in which the treatment technology and treatment equipment used has been adapted to the method of washing and the volume of washes.

03 Water removed for treatment

Oil separators and systems for water treatment that is connected to the wash installation shall not be charged by surface water. However, the treatment system may be used for wastewater from areas used for purposes other than vehicle washing, provided that this is approved by the supplier of the treatment system and the authorities. Toilets must not be connected to the treatment system due to the risk of the spread of infections.

A sketch/flow chart of the wash installation must be submitted showing:

- the wash installation's water and drainage systems
- the location of the washing machines
- the location of the treatment equipment
- oil and sludge separators, overflow
- sampling points
- water meter
- connection points etc.

The sketch/flow chart must also show the water supply, any recycling of water and waste water from the facility, the water outlet, where the water is recycled and where it is released from the installation.

Description in accordance with the requirement.

04 Installations with re-circulating water

Vehicle wash installation with recycling water system must be designed to prevent anaerobic conditions in the water.

A description of the measures taken to prevent anaerobic condition in recycling water systems.

05 Water from sludge tanker trucks at installation with re-circulated water

Tanks and containers in the treatment system with re-circulated water must be re-filled with clean water or with water from the sludge tanker truck if it is guaranteed that the sludge tanker is not contaminated with heavy metals or bacteria.

Declaration of fulfilment, appendix1, that the sludge tanker truck is not contaminated or declaration that tanks and containers are refilled with clean water.

06 Manual wash installations

Re-circulated water may not be used in manual wash installations.

In wash installations where the customer manually washes his car, the selection of car cleaning chemicals, dosage and water consumption must be pre-programmed (automated).

Documentation regarding control of car cleaning chemicals, dosage and water consumption in manual wash installations.

07 Emissions from the wash installation

Emissions to the drainage system from automated and manual wash installations must not exceed the values specified in the tables below.

Cars must fulfil the requirements in Table A.

Buses and trucks must fulfil the requirements in Table B.

The emissions must be calculated as monthly average values. For information on water sampling, see appendix 7 "Analysis and control"

Table A - emissions from wash installations dimensioned for cars

	Emissions (fill in)	Requirements	
		The Nordic countries except	Denmark and Skåne in Sweden
Pb, Ni, Cr		7 mg/car	6 mg/car
Cd		0,1 mg/car	0,05 mg/car
Zn		50 mg/car	50 mg/car
Cu		10 mg/car	10 mg/car
Oil		1,5 g/car	0,75 g/car

Table B - emissions from wash installations dimensioned for trucks and buses

	Emissions (fill in)	Requirements	
		The Nordic countries except	Denmark and Skåne in Sweden
Pb, Ni, Cr		21 mg/vu	18 mg/vu
Cd		0,3 mg/vu	0,15 mg/vu
Zn		150 mg/vu	150 mg/vu
Cu		30 mg/vu	30 mg/vu
Oil		4,5 g/vu	2,25 g/vu

One vehicle unit (vu) is a vehicle, truck or bus, with a length of 12 metres.

0.5 **vu** is a van or minibus, for instance, with a length of about 6 m.

1.5 **vu** are, for instance, an articulated bus or semi-trailer rig with a length of about 18 m

2 **vu** are a truck plus trailer with a length of about 24 m.



Test results. The water analysis shall be carried out by a competent laboratory and use test methods specified in appendix 7.

08 Water consumption

Maximum number of litres of fresh water that may be used per washed vehicle, calculated as an annual mean, must not exceed the values specified in the tables below. For information on sampling and period of sampling, see Appendix 7 “Analysis and control”.

Wash installations dimensioned for cars must fulfil the requirements in Table A.

Wash installations dimensioned for trucks and buses must fulfil the requirements in Table B.

Table A - water consumption per washed car

	Water consumption (fill in)	Requirement
Denmark and Skåne in Sweden		70 litre
The other Nordic countries and the other part of Sweden		90 litre

Table B - water consumption per washed bus or truck

	Water consumption (fill out)	Requirement
Denmark and Skåne in Sweden		210 litre
The other Nordic countries and the other part of Sweden		270 litre

Water consumption includes water used for cleaning the vehicle wash installation and dilution of concentrated cleaning products and possible water from filter treatment of fresh water. Water used to dilute super-concentrates to concentrates is exempted. Water used to fill the system after emptying may be exempted (providing no water is discharged during the filling phase).

Recording of water consumption.

09 Emptying systems for toilets

If the installation is intended for washing buses with on-board toilets, an emptying system shall be available to ensure that toilet waste is not discharged so that the re-circulating water will not be contaminated.

If there are no emptying facilities, the customer shall be informed that the toilet must not be discharged into the installation, since this would give rise to the risk of the spread of infections.

Description of how the emptying system for the toilet performs and an outline of the way in which customers are informed in case there is no emptying system.

On-site checks to verify that customers are informed if there is no emptying system.

O10 Special vehicles

When vehicles requiring special hygiene are washed, such as vehicles covered by EC 852/2004, only fresh water may be used, i.e. no re-circulating water. However, the total emission values per vehicle must be met. If the plant washes both vehicles that demand extra hygiene and vehicles that may be washed with re-circulated water, the plant shall be equipped with a so-called double system. Double system means that the plant can temporarily be switched over to using fresh water only.

Description of how vehicles requiring special hygiene are washed.

Point score requirements

P1 Emission from the wash installation, a maximum of 5 points may be achieved

Cars must fulfil the requirements in Table A.

Trucks and buses must fulfil the requirements in Table B.

The emissions must be calculated as a monthly mean. For information on water sampling, see appendix 7 "Analysis and control".

VOC are calculated on the basis of ingoing amount of VOC in the vehicle wash products in accordance with the amount of vehicles washed.

DEHP: *Di(2-ethylhexyl)ftalat*

VOC: *organic substances with vapour pressure > 0,010 kPa at 20 degrees C or boiling point < 250 degrees C at 101,3 kPa (1 atm).*

COD: *Chemical Oxygen Demand*

Table A - emissions from wash installations dimensioned for cars

	Point score requirements		Points scored
	The Nordic countries except	Denmark and Skåne in Sweden	
DEHP	Measuring of DEHP: 1p DEHP measure < 1 mg/car: 1p (a total of 2p can be achieved)		p
VOC	Calculation of VOC: 1p		p
COD	COD < 100 g/car: 1p COD < 50 g/car: 2 p	COD < 50 g/car: 1p COD < 25 g/car: 2 p	p
TOTAL:			p

Table B - emissions from wash installations dimensioned for trucks and buses

	Point score requirements		Points scored
	The Nordic countries except	Denmark and Skåne in Sweden	
DEHP	Measuring of DEHP: 1p DEHP measure < 3 mg/vu: 1p		p
VOC	Calculation of VOC: 1p		p
COD	COD < 300 g/vu: 1p COD < 150 g/vu: 2 p	COD < 150 g/vu: 1p COD < 75 g/vu: 2 p	p
TOTAL:			p

One vehicle unit (vu) is a vehicle, truck or bus, with a length of 12 metres.

0.5 **vu** is a van or minibus, for instance, with a length of about 6 m.

1.5 **vu** are, for instance, an articulated bus or semi-trailer rig with a length of about 18 m.

2 **vu** are a truck plus trailer with a length of about 24 m.



Test results and account of the points. The water analysis shall be carried out by a competent laboratory according to test methods specified in appendix 7.

P2 Water consumption, a maximum of 4 points may be achieved

The water consumption is calculated as number of litres of fresh water used per washed vehicle, calculated as an annual mean. For information on testing and test period, see Appendix 7 “Analysis and control”.

Wash installations dimensioned for cars must fulfil the requirements in Table A.

Wash installations dimensioned for trucks and buses must fulfil the requirements in Table B.

Table A - water consumption per washed car

	Requirements	Points achieved
Danmark and Skåne in Sweden	50 litres: 2 points	p
	35 litres: 4 points	p
The other Nordic countries and the other part of Sweden	65 litres: 2 points	p
	45 litres: 4 points	p
TOTAL:		p

Table B - water consumption per washed bus or truck

	Requirements	Points achieved
Danmark and Skåne in Sweden	155 litres: 2 points	p
	105 litres: 4 points	p
The other Nordic countries and the other part of Sweden	200 litres: 2 points	p
	135 litres: 4 points	p
TOTAL:		p

Water consumption includes water used for cleaning the vehicle wash installation and dilution of concentrated cleaning products and possible water from filter treatment of fresh water. Water used to dilute super-concentrate form to concentrated forms is exempted. Water used to fill the system after emptying may be exempted (providing no water is discharged during the filling phase).



Documentation for calculations of water consumption and record of points.

P3 Energy audit – a maximum of 6 point can be achieved

The wash installation has a system for automatic gate closure in the winter: 2 p

The wash installation is encompassed by an energy management system in accordance with the principles in DS2403 or equivalent: 2 p

The wash installation is equipped with automatic light control: 1 p

Information on energy consumption per vehicle washed (measured or calculated over a representative period for the installation): 1 p

Introduction of other energy means that substantially reduces the energy consumption (points given after approval from Nordic Ecolabelling): up to 2 p

DS2403: CEN is currently working on a European Standard which will replace the national standards. The work has just started.



Documentation in accordance with the requirement.

2 Chemicals

All chemicals used in the cleaning of vehicles and wash installations must fulfil the requirements in O11 and O12.

In the case of Nordic Ecolabelled products O11 and P4 shall be accounted for.

Chemical products used for water treatment must fulfil the requirements in O11 and O13.

Obligatory requirements

O11 Overview of chemicals

Overview of the chemicals used in the operation of the wash installation, including information on manufacturer/supplier, function (degreasing, waxing etc.), quantity and ecolabelling if any.

- Account of the chemicals used in accordance with Appendix 2.

O12 Requirements to chemicals

All chemical products used for cleaning vehicles and wash installation must fulfil all requirements in Appendix 3. Nordic Ecolabelled products fulfil the requirements in Appendix 3, information of licence numbers are sufficient documentation.

- Documentation in accordance with requirements in Appendix 3 or reference to licence numbers for Nordic Ecolabelled products.

O13 Chemical products for water treatment

Water treatment chemicals (for example products for pH-regulation, chemical precipitation and eliminating micro-organisms) must not contain chloro-organic substances or reactive chlorine compounds, which can form chloro-organic metabolites.

- Declaration from the manufacturer of the water treatment chemicals, verifying that the products do not contain chloro-organic substances or reactive chlorine compounds, which can form chloro-organic metabolites.

Point score requirements

P4 Ecolabelled products, a maximum of 4 points may be achieved

Points are awarded for the use of Eco-labelled products (calculated in terms of active substances) used for washing vehicles and installation. Ecolabelled products mean products with either the Nordic Ecolabel, EU-Ecolabel or the SSNC's Good Environmental Choice.

Percentage eco-labelled products:	Points
> 70% ecolabelled products	4 points
50 - < 70% ecolabelled products	3 points
30 - < 50% ecolabelled products	2 points
10 - < 30% ecolabelled products	1 point
< 10% ecolabelled products	0 point

- Overview of the proportion of ecolabelled products (calculated in terms of active substances) based on the information provided on chemicals in Appendix 2.

Active substance: Chemical substances excluding water

3 Total score

The maximum score is 19 points. The wash installation must achieve at least 5 points to be Nordic Ecolabelled.

Emissions (transfer points from page 10)	
Water consumption (transfer points from page11)	
Energy audit (transfer points from page 11)	
Eco-labelled products (transfer points from page 13)	
Total:	

At least 5 points achieved

Yes

No

4 Environmental management and regulatory requirements

M1 Organization and responsibility

An organizational chart shall be drawn up. Responsibility for the Nordic Ecolabel licence, marketing, training and purchasing shall be specified.

☒ Description in accordance with the requirement.

M2 Self-assessment

Self-assessment and journal recording shall be performed in accordance with a self-assessment programme comprising the following:

- The values that are measured and monitored (O7+P1 and O8+P2)
- The frequency of measurements
- The way in which the information from the assessment is documented

☒ Copy of self-assessment programme in accordance with Appendix 4.

M3 Initial sampling

Upon application for a Nordic Ecolabel the wash installation must undergo an initial control. The initial control includes the measurement of water consumption (O8+P2) and emissions from the wash installation (O7+P1).

☒ Test-results from the initial sampling in accordance with appendix 5.

M4 Annual reporting

Each year by 31 March the licensee must submit the results of its annual control to Nordic Ecolabelling. The annual report must include information on the number of vehicles washed, water consumption, chemical consumption and calculated emissions of heavy metals and oil.

☒ Results from the annual control in accordance with appendix 4.

M5 Procedures and instructions

Each vehicle wash installation must have documented procedures and instructions that ensure that the Nordic Ecolabelling criteria are fulfilled regarding:

- operation and maintenance of the vehicle wash installation
- co-ordination of all the suppliers involved
- reporting to the management and to the ecolabelling organization

☒ Description in accordance with the requirement.

M6 Training

All employees and other personnel involved in day-to-day operations must have the skills required to ensure that the Nordic Ecolabel requirements are fulfilled.

Description in accordance with the requirement.

M7 Reports

Each wash installation must report to management and to the ecolabelling organisation in the event of unforeseen deviations, planned changes (e.g. changes in the chemicals used), complaints, emissions.

Description in accordance with the requirement

M8 Routines for microbiological growth protection

The installation must have routines that secure sufficient protection against transmission of Legionella and E.coli.

Routines may be cleaning and disinfection immediately before the installation is operating for the first time or if the installation has not been used for a period of time, for instance a month. Cleaning or disinfection should also be considered if the installation, or parts of it, has been altered or opened for maintenance purposes in a way that risk of infection exists or may occur.

Description in accordance with the requirement

M9 Storage of chemicals

Drains in the floors of chemical storage rooms must be connected to the treatment system for the wash installation. Drains constructed in a way to limit the effects of chemical spills (for instance sealed or with valve) are exempted.

A description of the way in which chemicals are stored and the way in which the drain in the floor of the chemical room is constructed.

M10 Safety data sheets

Product safety data sheets for the chemical products used for cleaning and water treatment must be readily available at the installation.

A report on where the safety data sheets are kept.

M11 Information on use of customers own agents/degreasing agents

The customers must be informed that use of their own products/degreasing agents, are not permitted. This regards both manual and automatic wash installations

A report on which measures are used to prevent customers from using their own degreasing agents.

M12 Waste management

Waste from oil and sludge separators and other pollutants from the treatment system must be handled by a facility approved by the authorities to process this type of waste.

- A copy of the current agreement between the owner of the installation and the carrier and a copy of the carrier's permit.

M13 Recycling system

Waste must be sorted for reuse and recycling

- Declaration from receiving station and description of sorting at source.

M14 Interruptions

The treatment system shall be functioning and operational while the wash installation is in use. Interruptions to the operations of the treatment system must be repaired before the wash installation operates again.

- A report on the routines in case of operational breakdown of the water treatment system/equipment.

M15 Quality

After being washed in the installation the vehicle shall be as clean as if it had been washed in some other commercial wash installation that uses equivalent methods of washing.

Account of the quality of the performance of the wash installation including the following information:

- Removal of traffic film
- removal of fuel stains around the filler cap
- Removal of asphalt stains
- Drying stains and chemical spots
- Number of complaints from customers
- Odour problems in the wash installation etc.

- A current register of customer complaints and the reasons for the complaints (e.g. drying problems, spots, odour problems etc)

M16 Legislation and regulations

The licensee must guarantee adherence to environmental laws and regulations in the country in question. This means that emission of water to the drainage system must in accordance with the authority's regulations. Routines must be available to interpret which requirements the environmental laws demand and supervise that the installation fulfils the requirements.

M17 Marketing

Marketing of the Nordic Ecolabelled wash installation shall be in accordance with "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

- Documentation on how the marketing of the Nordic Ecolabelled installation is organized and a declaration in accordance with Appendix 6 which states that the

person responsible for the marketing has knowledge of “Regulations for the Nordic Ecolabelling of products”.

Marketing

The Nordic Ecolabel is a very well-known and well-reputed trademark in the Nordic region. The Nordic Ecolabelled product/service may be marketed using the Swan label so long as the associated licence is valid.

The label must be positioned so that there is no doubt as to what the label refers and so that it is clear that the vehicle wash installation is ecolabelled.

More information on marketing can be found in “Regulations for the Nordic Ecolabelling of products” 22 June 2011 or later versions.

Design of the Nordic Ecolabel

Design of the Nordic Ecolabel:



licence number

It must be clearly stated that the vehicle wash installation is Nordic Ecolabelled.

Each licence has a unique six-figured licence number that must be displayed along with the label.

More information on the design of the label can be found in “Regulations for the Nordic Ecolabelling of products” 22 June 2011 or later versions.

Follow-up inspections

Nordic Ecolabelling may decide to check whether the installation fulfils the Nordic Ecolabel requirements during the licence period. This may involve a site visit, random sampling or similar test.

The licence may be revoked if it is evident that the installation does not meet the requirements.

Random samples may also be taken in the vehicle wash installation and analysed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licensee.

How long is a licence valid?

Nordic Ecolabelling adopted version 2 of the criteria for vehicle wash installations on 14 June 2007. The criteria are valid until 30 June 2011.

The Secretariat Managers Meeting decided on 11 November 2009 to prolong the validity of the criteria with two years until 30 June 2013. The new criteria version is called 2.1.

The Nordic Ecolabelling Board decided on 15 June 2012 to prolong the validity of the criteria with one year until 30 June 2014. The new criteria version is called 2.2.

The Secretariat Managers Meeting decided on 15 May 2013 to prolong the validity of the criteria with six months until 31 December 2014. The new criteria version is called 2.3.

The Nordic Ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

New criteria

In the next revision definite energy requirements may be included. Further the possibility to adopt obligatory and measurable requirements to DEHP, VOC and COD will be evaluated.

Appendix 1

Declaration regarding sludge tanker trucks (O5)

The following declarations may be used by applicants when applying for a licence for a Nordic Ecolabel for vehicle wash installation.

Sludge tanker truck company:
Address:
Vehicle wash installation being purified:

We guarantee that when emptying the installation's purification system the water from the sludge tanker truck is from a cleaned sludge tank truck. This is to prevent the water to be contaminated with bacteria or other pollutants.

Date:	Phone:
Person responsible	e-mail:
Signature:	

Appendix 2

Overview of chemicals (O11)

The following declarations may be used by applicants when applying for a licence for a Nordic Ecolabel for vehicle wash installations.

The declaration applies to vehicle wash installation with the following name:

Vehicle wash installation:
Address:
Delivered by:

Chemicals used in the vehicle wash installation must be filled in the table below.

The amount of ecolabelled chemicals is calculated in terms of active substance.

Active substance: Chemical substances excluding water.

Overview of the chemicals used in the vehicle wash installation

Name of chemical	Producer/delivered by	Function (degreasing, wax, etc)	Quantity used (kg/year)	Active substance (exclusive water)	Ecolabelled (licence number)

Date:	Phone:
Contact person:	e-mail:
Signature:	

In case of change of products/chemicals used, a new declaration must be submitted to Nordic Ecolabelling.

Appendix 3a

Requirements to chemicals (O12)

All chemical products used for cleaning of vehicles and wash installations (overview O11), must fulfil all the requirements in this appendix. Nordic Ecolabelled products compile with the requirements and additional documentation is not required.

Chemical products ecolabelled with the EU-Ecolabel or SSNC's Good Environmental Choice can be documented by license number and a declaration that the requirements are fulfilled according to appendix 3b.

The requirements concern all ingoing substances if not otherwise specified. Ingoing substances means all substances in the product, also additives (i.e. preserves or stabilizers) in the ingredients, except contaminants from the raw material production. Contaminants are defined as residues from the raw material production present in the final product in concentration below 0.01 % (corresponding 100 ppm), but not substances added to a raw material deliberately, regardless of amount.

Declaration

For all chemicals used for cleaning of vehicles and wash installations that are not Nordic Ecolabelled, appendix 3b must be completed and signed.

Declaration of fulfilment according to appendix 3b.

Formulation

For at least 95 volume-% of the chemicals used that are not ecolabelled, the complete formulation must be submitted to Nordic Ecolabelling.

The formulation shall include the trade name, chemical name, ingoing quantity and CAS register number of each ingredient. The water content and function of the ingredients shall be stated.

Complete formulation as detailed above and material safety data sheet/product data sheet for the product and all ingoing substances complying with Directive 2001/58/EC.

Classification of the product

Products used in Nordic Ecolabelled wash installations, must not be classified as specified in table below according to regulations in any Nordic country or according to EU directives on dangerous substances or preparations 67/548/EEC and 1999/45/EEC (with adaptations and amendments).

Table - classification of the product

Classification	Symbol and risk phrase
Dangerous to the environment	N and R50, R50/53 or R51/53 and R52, R53 or R52/53 without N
Very toxic	T+ with R26, R27, R28, R39
Toxic	T with R23, R24, R25, R39, R45, R46, R48, R49, R60, R61
Harmful	Xn with R20, R21, R22*, R40, R48, R62, R63, R65*, R68
Irritating	Xi with R41*
Sensitising	Xn with R42 or Xi with R43
Corrosive	C with R34* and R35
Explosive	E with R2 and R3
Extremely flammable	Fx (F+ in Norway) with R12
Highly flammable	F with R11, R15 and R17

* Applies to products not used in automatic washing installations.

Please note that the manufacturer of the raw material/product is responsible for classification.



Declaration of fulfilment of the requirement regarding classification in appendix 3a.

Classification of super-concentrates

The classification of super-concentrates for professional users is calculated on the basis of super-concentrate diluted to concentrated form. The following requirements must be fulfilled:

The super-concentrate diluted to concentrate must fulfil the classification requirements (in concentrated form).

The packaging must be designed in such a way that there is no risk that the user will come into contact with the product. For super-concentrates a technical instruction and user manual must be available describing how to avoid contact with the product.



Documentation of fulfilment.

Degradability

All organic substances and their degradation products shall be readily aerobically degradable in accordance with OECD Guidelines No. 301 A – F* or other equivalent methods and anaerobically degradable in accordance with ISO 11734 other equivalent method

The following compounds are exempted from the degradability requirement:

- Dyes
- non-chlorinated polymer
- non-chlorinated natural and synthetic waxes
- preservatives
- iminodisuccinate
- fragrance (see requirements to fragrance below)
- denaturing agents in ethanol

**surfactants are exempted from the 10 days window*

Substances that are not surfactants and which are not included in the DID-list may be exempted from requirements with regard to anaerobic degradability if they are:

- readily aerobically degradable and has low absorption ($A < 25\%$) or
- readily aerobically degradable and has high absorption ($D > 25\%$) or
- readily aerobically degradable and have not potential for bioaccumulation

The DID is a joint list for the EU ecolabelling scheme and Nordic Ecolabelling. The list was developed in co-operation with interested parties both from consumer and environmental organisations and the industry, and contains information on the toxicity and degradability of a number of substances that could be used in chemical products. The substances contained in the DID list do not express the substances found in ecolabelled products.

The DID list cannot be used for documenting the toxicity of individual substances for the purposes of the classification regulations. Information regarding classification must be taken from product safety data sheets, from the literature or obtained from raw material manufacturers.

The DID list is available from the ecolabelling organisation or via the websites, see page two.

For these criteria the DID list adopted in January 2007 or later versions will apply.



Results from tests stating the biological degradability, aerobic and anaerobic of each organic compound.

Substances that must not be present in the product

The substances listed below must not be present in the product:

- halogenated and/or aromatic solvents
- linear alkylbenzene sulphonates (LAS)
- alkyl phenol ethoxylates (APEO) and alkylphenolderivates (APD)
- perfluorinated and polyflourinated compounds (PFAS)
- chloro-organic substances or reactive chlorine compounds capable of forming chloro-organic metabolites

Declaration of fulfilment.

Volatile organic compounds

Volatile organic compounds, VOC, may be included in the product in a content not exceeding 6.0%. Products that contain more than 6.0% VOC, must fulfil the requirement regarding “Volatile organic compounds (R15)” in the ecolabelling criteria for car and boat care products (version 4.0):

Volatile organic compounds (products that contain more than 6.0% VOC):

The product may contain a limited quantity only of volatile organic compounds (VOC) that may contribute to the formation of photochemical smog, measured as POCP.

The maximum content of VOC in the product is 12 g ethylene equivalents/kilo of product.

$$\frac{\sum m_i \cdot POCP_i + m_2 \cdot POCP_2 + \dots}{m_{product}} \leq 12 \text{ g C}_2\text{H}_2 \text{ equivalents / kg}$$

m_i – mass in grams of VOC_i in the product

$POCP_i$ - VOC_i substance's factor in Table 1 in Appendix 4 in the criteria for car and boat care products (version 4.0)

$m_{product}$ product mass in kg

VOC: organic substances with a vapour pressure > 0.010 kPa at 20°C or boiling point < 250 °C at 101,3 kPa (1 atm).

POCP: Photochemical Ozone Creation Potential

In the case of solvents not included on the list in Appendix 4 in the criteria for car and boat care products (version 4.0), POCP values from experiments/tests may provide the basis for calculating the permitted VOC content alternatively the worst case for the VOC group may be used.

In the case of super-concentrates, the POCP calculation must be performed using the concentrated form.

Products used in the winter period to remove asphalt stains are exempted from this requirement.

Documentation of fulfilment.

NTA

NTA may be included in an amount not exceeding 20 g/l of final solution (calculated as C₆H₆NO₆).

Products containing NTA are regulated in Denmark in the Working Environment Authority notice concerning preventive measures against cancer risk for personnel working with substances and materials, No. 140 of 17 February with subsequent amendments.

NTA is expected to be classified as Xn; R40 Cat; Carc 3 in March 2008. The amount of NTA will then be limited of the classification requirement (appendix 3a)

- Calculation of the amount of NTA (calculated as C₆H₆NO₆).

Preservatives

Preservatives must not be potentially bioaccumulative according to OECD Guidelines 107, 117 or 305.

- Results from tests stating the BCF or LogPow.

Dyes

Pigments in dyes must not be based on heavy metals (lead, cadmium, mercury, chromium with oxidation level 6), aluminium or copper.

All dyes present in the product as ingredient or in a raw material must be approved for use in foodstuffs in any Nordic country. Alternatively the dye must have a log Pow < 3,0 or BCF < 100.

- Declaration of fulfilment.
- Specification of E-number (number assigned by approval of foodstuff), alternatively Log Pow or BCF.

Fragrance

Fragrances used must comply with IFRA's recommendations.

IFRA's (International Fragrance Association) Guidelines can be found at www.ifra.org/guidelines.asp

The product may not contain any of the following compounds (with CAS no.):

Compound	Cas-number
Musk xylene	81-15-2
Musk ambrette	83-66-9
Moskene	116-66-5
Musk tibetine	145-39-1
Musk ketone	81-14-1
HHCB	114109-62-5, 114109-63-6, 1222-05-5, 78448-48-3 and 78448-49-4
AHTN	1506-02-1 and 21145-77-7

Allergenic fragrance substances specified in appendix 3 in the criteria for car and boat care products (version 4.0) may not be present in the product.

- Declaration from the fragrance manufacturer that the fragrances comply with IFRA Guidelines, appendix 2.
- Declaration according to appendix 3b stating that musk compound specified in the table above and allergenic fragrance substances in appendix 3 in the criteria for car and boat care products (version 4.0) are not present in the product.

Appendix 3b

Declaration regarding chemicals that are not Nordic Ecolabelled (O12)

Producer:
Trade name:

Knowlegde of the criteria for vehicle wash installations

We have received information regarding the criteria for Nordic Ecolabelling of vehicle wash installations and are well acquainted with the requirements regarding chemicals used in Nordic Ecolabelled vehicle installations as described in appendix 3a.

↑ Yes

↑ No

Fulfillment of requirements

The above mentioned product fulfils all requirements to chemicals stated in appendix 3a in the criteria for Nordic Ecolabelling of vehicle wash installation, including requirements regarding:

- classification of the product
- degradation of organic substances
- substances that may not be present in the product
- VOC
- NTA
- Preservatives
- Dyes
- fragrance

↑ Yes

↑ No

Date:	Phone number:
Responsible person:	e-mail:
signature	

		Month												Total pr year	Prognosis next year		
		1	2	3	4	5	6	7	8	9	10	11	12				
7 - Emission of cadmium (Cd) – O7	Water sample result (mg/l)																
	Total (g)																
	Per washed vehicle (mg/car)																
8 Emission of zinc (Zn) – O7	Water sample result (mg/l)																
	Total (g)																
	Per washed vehicle (mg/car)																
9 Emission of copper (Cu) – O7	Water sample result (mg/l)																
	Total (g)																
	Per washed vehicle (mg/car)																
10 Emission of oil – O7	Water sample result (mg/l)																
	Total (kg)																
	Per washed vehicle (g/car)																
11. Measurement of DEHP – P1																	
12. COD measurement – P1	Before cleansing:																
	After cleansing:																

Appendix 5

Report - initial sampling (M3)

Vehicle wash installation:
Address:

Calculated number of washes per year: _____ Max number of vehicles per 24 h: _____

Date of sampling: _____ Date of latest sludge emptying: _____

Number of vehicles washed after the latest sludge emptying and before sampling:

Sampling was performed:

automatic flow proportional

manual

Table 1: Declaration of number of washes and water consumption during the sampling period

	D 1	D 2	D 3	D 4	D 5	D 6	D 7	Σ
Number of cars/vehicles washed (vu)								
Total water consumption (litre)								
Water consumption per vehicle (l/vehicle)								
Mark 24 h period of sampling (X)								

Table 2: Fill in the discharges during the sampling period

	A	B	C
Requirement O7 and P1	Concentration in waste water	Emission per car/vehicle	Total emission during the week
Lead (Pb) + Nickel (Ni) + chrome (Cr)	mg/l	mg/car	g
Cadmium (Cd)	mg/l	mg/car	mg
Zinc (Zn)	mg/l	mg/car	g
Copper (Cu)	mg/l	mg/car	g
Oil, nonpolar aliphatic hydrocarbons	g/l	g/car	g
DEHP			
COD			

Explanations

The number of washes should be based on monthly reading of the automatic counters.

Total water consumption reports must include all water consumption in the wash installations. The quantity of water used for refilling the system after emptying, however, is not included in this figure (providing no water is discharged during the filling phase).

Consumption of cleaning agents refers to chemicals used to clean the vehicles, i.e. degreasers, car shampoo, run-off and rinsing agents, etc. Calculation and reporting of quantities must be for products in their undiluted form.

The amount of sludge/water transported from the installation shall be read from the invoice or transport receipt.

In order for the installation to be considered accessible, both the equipment for car washing and water purification must be in operation at the same time and with satisfactory function. The time reported as "Time installation is in operational stoppage" is the time that the installation has come to a standstill due to a reduced function on the washing or water purification equipment. Operational accessibility should be expressed as a % and calculated as follows: $100 - (\text{time in stoppage} \times 100 / \text{forecast accessible time})$.

Unplanned occasions when there have been interruptions in the washing and/or water purification process are recorded under "no. of operational interruptions".

"Sampling results" means the sample results governing emissions over the year. I.e. if the samples are taken in the November - December last year and this year, it is the results from last year that should be reported in the table. The results from this November - December will be the guide values for next year. If, however, the samples are taken during January- April this year, these are the results that are reported.

Calculating the results of quantity emitted "Per washed car" is done as follows:

The quantity emitted per vehicle is calculated by first calculating the average water emission per vehicle per month. This is found by dividing total water consumption per month by the number of vehicles during the same month. The estimated water loss (max 15 l per car and max 45 l pr vu) is subtracted from this figure.

The average water emission (l/vehicle) is then multiplied by the concentration of each parameter (mg/l) . The result is the quantity emitted per vehicle (mg/vehicle). The total emission for the period is calculated by multiplying the emission per vehicle of each parameter (mg/vehicle) , by the total number of vehicles washed during the period

Example:

A total of 50 000 litre water is used during one month while cleaning 1000 cars. The water consumption is 50 litres pr wash. The estimated water loss, 15 litres, are subtracted giving an average of 35 litres pr wash per month. The result from the Zn analyse was 0,5 mg/l, corresponding to 35 litre/car x 0,5 mg Zn/litre = 18 mg Zn per carwash.

Comments: _____

Place: _____

Date: _____

Signatur: _____

Appendix 6

Marketing of Nordic Ecolabelled vehicle wash installations

We hereby certify that we are well acquainted with the regulations governing the use of the Nordic Ecolabel, as detailed in “Regulations for the Nordic Ecolabelling of products” 22 June 2011 or later versions. We agree to follow these regulations when marketing the Nordic Ecolabelled vehicle wash installation.

Further, we confirm that we are familiar with the criteria document regarding the Nordic Ecolabelling of vehicle wash installation.

We undertake to advise those individuals within the company involved in marketing the Nordic Ecolabelled vehicle wash installation of the criteria for the Nordic Ecolabelling of vehicle wash installation and “Regulations for the Nordic Ecolabelling of products” 22 June 2011 or later versions.

Declaration:

Company name:	
Address:	
Marketing director:	Phone:
Contact person:	Phone:
Place:	Date:
e-mail:	

In case of a change in personnel, a new declaration must be submitted to Nordic Ecolabelling.

Appendix 7

Analysis and control

1 Water sampling

On application, the wash installation must undergo an initial check (M3) to prove that the requirements in O7 and P1 are met, see appendix 5.

During the license period, fulfilment of the discharge requirements specified in O7 and P1 shall be documented through water sampling. Water samples shall be collected approximately one year after the licence is granted and should be done during the period of 1 November to 30 April each year. It is not necessary to carry through an annual check the first year after receiving a licence if the initial sampling (M3) was accomplished in the same period of time.

Nordic Ecolabelling reserves the right to demand further water sampling during the license period if this is considered necessary (such as in case of a change of chemicals, change of washing equipment, or the irregular use of the vehicle wash installation).

Sampler	The sampling shall be carried out by a person from an accredited body or a person with certificate/diploma in water sampling.
Time of year	Sampling must be conducted between 1 November and 30 April, and when at least 10% of the annual number of vehicles has been washed after the sludge/oil separator has been emptied.
Sampling point	Sampling must take place at a point, after the purification equipment but before the connection to the local wastewater network, where the collected wastewater flow from the wash installation passes. Water turbulence is important at the sampling point, to avoid samples of water in layers.
Sampling technique	Manual random sampling.
Sampling period	Water consumption must be recorded for the week (7 days) that random samples are taken. The total water consumption shall be divided by the number of vehicles washed during the same period.
Load	Random samples shall be taken while vehicles are washed in the vehicle wash installation. Samples shall be taken of the water that is fed to the wastewater network.
Calculations	<p>Water consumption per car (l/car) is calculated by dividing the water consumption for the whole week (7 days) the sampling was conducted, by the number of cars washed in the same week.</p> <p>For buses/trucks, the amount of washed vehicles is estimated/calculated. Thereafter, the water consumption is divided by the number of washed vehicle units.</p> <p>The quantity of emissions for each parameter is calculated by subtracting the estimated loss of water (max 15 l/car or 45 l/vehicle unit) from the water consumption per car (l/car) (l/ vehicle unit), as calculated above, and multiplying the result by the analysis result from the sampling (mg/l).</p>
Number of samples for automatic flow-controlled sampling	5 day-samples must be taken in proportion to the flow during a period of 5 consecutive days. The sampler shall decide when the samples are taken in conjunction with washing activity. The 5 day-samples must be combined to form one composite sample which is analysed for Pb, Ni, Cr, Cd, Zn and Cu.

	If chemical cleaning products with > 10% organic solvents (based on conc. product) are used, the day-samples from days 1, 3 and 5 must be analysed individually for nonpolar aliphatic hydrocarbons.
	If chemical cleaning products with < 10% organic solvents (based on conc. product) are used, the day-sample from day 3 must be analysed for nonpolar aliphatic hydrocarbons.
Number of samples during manual sampling.	At least 5 sub-samples must be taken each day for 5 consecutive days. The samples shall be extracted when washing activity is in progress. The sub-samples must be combined to form one composite sample which is analysed for Pb, Ni, Cr, Cd, Zn and Cu.
	If chemical cleaning products with > 10% organic solvents (based on conc. product) are used, sub-samples from days 1, 3 and 5 must be analysed individually for non-polar aliphatic hydrocarbons. Note that it is a sub-sample which is to be analysed, not day-samples.
	If chemical cleaning products with < 10% organic solvents (based on conc. Product formulation) are used, a sub-sample from day 3 must be analysed for nonpolar aliphatic hydrocarbons. Note that it is a sub-sample which is to be analysed, not day-samples.
Analysis parameters	Random samples shall be analysed for Pb, Ni, Cr, Cd, Zn and Cu.
	If chemical cleaning agents containing organic solvents are used (see the product), an additional random sample shall be taken and analysed for nonpolar aliphatic hydrocarbons.
Handling the samples	The samples collected must be handled in such a way as to cause no changes in their composition. This means that both the collection container and the sample bottles must be clean. Samples to be analysed for nonpolar aliphatic hydrocarbons shall be taken directly in a glass container and stored in a dark place at a temperature between 0 and +4°C until analysis.
	The collection containers (applies to metals) must be shaken thoroughly before the samples are transferred to the sample bottles which are sent to the laboratory.

2 Analysis laboratory

The laboratories and testing bodies used for analysis and inspection must fulfil the general requirements of the EN ISO 17025 standard or have an official GLP approval.

The applicant's analysis laboratory/test procedure may be approved for analysis and testing if:

- sampling and analysis is monitored by the authorities, or
- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 9001 or ISO 9002, or
- the manufacturer can demonstrate agreement with a first-time test conducted at the manufacturer's own laboratory and testing carried out in parallel at an independent test institute, and the manufacturer takes samples in accordance with a fixed sampling schedule.

3 Chemical analyses

In exceptional cases, the ecolabelling organisation may permit another analysis method than the ones mentioned in the table below provided that the applicant can verify that the measuring accuracy is at least as precise as the methods stated in the table.

	Req	Method of analysis
Metals Cd, Pb, Cu, Cr, Ni og Zn	O7	EN ISO 11885 or corresponding national (Nordic countries) standard method
Nonpolar aliphatic hydrocarbons	O7	EN ISO 9377-2 or corresponding national (Nordic countries) standard method
DEHP	P1	GC-MS method (Gas Chromatography-mass spectrometry) with detection limit $\leq 0,5$ microgram/litre The method must be accredited or validated by other means
Aquatic acute toxicity		201-203 in OECD guidelines
Biological degradability		301 A-F in OECD guidelines
Potential bioaccumulation		BCF - must be determined using test method 305 in OECD guidelines and KOW or POW must primarily be determined using test method 107 in OECD guidelines. Method 117 in OECD guidelines can be used.

4 Follow-up inspection

A service that bears the Nordic Ecolabel may be inspected at any time by the ecolabelling secretariat. The secretariat bears the costs of the inspection unless, during the inspection, it is discovered that the product or service does not fulfil the ecolabelling requirements, in which case the licence holder bears the costs of the inspection.