**General environmental requirements for contract procurement**

**Introduction**

Environmental requirements for the procurement of Contract Works (Diary No:TRV2012 14513) are the requirements that are imposed by the Swedish Transport Administration (Trafikverket) on the procurement of contract services. Some of these requirements have been drawn up in cooperation with the Cities of Gothenburg, Malmö and Stockholm.

The requirements represent a base level that can be maintained throughout all contract assignments. In individual projects and assignments the Employer can impose higher and more object-specific environmental requirements.

The requirements have in the first instance been designed for the procurement of contract services, such as operation and maintenance and the construction of infrastructure.

The requirements replace the former Banverket FU:2000 environmental requirements and the former Vägverket publication 2006:105 ”Environmental Requirements for the Procurement of Contract Works and Services.”

**Purpose**

The requirements have been drawn up so that the environmental impact from the Contract Works performed will decrease. Clear, relevant and cost effective requirements lead to improved air quality, decreased energy consumption and a reduced use and distribution of poisonous substances.

Through dialogue and open communication with the sector, the Employer can stimulate the Contractor’s innovation capacity. At the same time, the detailed direction in the requirement setting process diminishes.

The goals of the requirements, with no mutual prioritisation, are that they shall:

* facilitate matters for employers, purchasers, project managers and contractors in their work on reducing the environmental impact of the Contract Works
* be applicable for all types of procurement within the contract area
* be easy to follow up
* be firmly anchored in both the Employer and Contractor lines.

The purpose is to make demands that in a cost-effective way reduce the environmental impact of the Contract Works. The basic starting points for whether or not a requirement shall be included in the common document are the following:

* A serious environmental problem is to be tackled
* The methods for employing procurement requirements shall contribute significantly to a decresase in the problem
* It shall be possible for the observance and the outcome of the requirement to be followed up
* The requirement shall be easily understandable and clearly defined
* The requirement shall not restrict competition, but shall at the same time stimulate contractors to adopt innovative solutions.

Requirements shall be constantly updated so that they are as relevant and up-to-date as possible. Therefore, it is important for contractors to submit their proposals for improvements to the Employer so that the weighing between the above points will be even better.

**Scope**

Environmental requirements concern environmental aspects related to the *performance* of Contract Works. They do not deal with *what* is to be carried out but to what applies when the work is being done. All requirements that are imposed must be calculable and possible to verify and follow up in a good way.

Environmental requirements that are taken up here are only a small part of all those environmental requirements that apply during the implementation of the Contract Works. The requirements are in general minimum requirements, and therefore do not cover all environmental issues that are taken up in a contract. There are also further requirements that are caused by local or organisation-specific specifications.

The requirements deal among other things with emissions into the atmosphere and the use of chemicals. Work environment requirements, quality requirements, and ethical and social requirements are not included, since these are dealt with in other documents and routines among the employers. It shall be possible for the environmental requirements to be harmonised with working methods and strategic issues in accordance with these other documents and procedures. The systematic environmental work and the environmental plan that are included in the environmental requirements can, for example, to advantage be integrated in presentations of systems and plans for quality, safety, health, social matters, etc. One major advantage of the fact that certain parts of the work have been performed in cooperation with the four employers is that requirements are coordinated and both contractors and their suppliers know which requirements apply and can act accordingly. It is then easier for them to plan their investments in machinery, and the development of operational systems and competence in order to live up to the requirements for a large part of the market in Sweden.

**Definitions**

Accompanying the requirements are guidelines and employer manuals, in which definitions are given for terms that are used in the requirement specifications.

**Application**

In order to support the Swedish Transport Administration in the application of requirements in contract procurements, a special employer manual has been drawn up. The employer manual shall be a living document, a document that is constantly updated to support application of the requirements.

**Results and documentation**

An Administration Plan has been drawn up for general environmental requirements, TRV 2012:14633. The Administration Plan covers the management of the Swedish Transport Administration’s general environment requirements and all associated relevant documents, checklists and models.

The document has been drawn up in conjunction with a review of general environmental requirements, and which shall replace existing requirement documents in the procurement of contracts. In the former Banverket and Vägverket organisations, there have been no clear Administration Plans. During the production of common environmental requirements for the Swedish Transport Administration, attention has been drawn to the need for the preparation of an Administration Plan.

The purpose of the Environmental Plan for ”General Environmental Issues” (common + supplementary) is to:

* Clarify/describe how administration and follow-up of environmental requirements shall be performed. They may concern the updating of documents, routines, etc. For example guidelines, employer manual and routines for updating.
* Clarify responsibilities and authority when it comes to the ongoing administration of requirements
* Support a consistent interpretation of the requirements
* Make it possible to obtain measureable effects of requirements
* Contribute towards benefit being gained of experience so that the continuous development of requirements takes place.
* Make sure that the Administration Plan is integrated in the Swedish Transport Administration’s procurement model.

The objective of the work is that environmental requirements shall be handled in an effective, structured and systematic way by clarifying roles, responsibility and organisation.

Change Log

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| --- | --- | --- | --- |
| Adopted version | Document date | Change | Name |
| Version 1.0 | 2012-03-19 |  |  |
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**PRECONDITIONS AND APPLICATION**

The purpose of these requirements is to create cost-effective environmental benefits in the performance of the Contract Works. Certain parts of these requirements have been agreed to between Gothenburg, Malmo and Stockholm city authorities and the Swedish Transport Administration, and apply to all procurements of Contract Works that are made in these organisations.

The requirements apply to the Contractor’s organisation and to the activities the Contractor conducts on behalf of the Employer. The requirements apply also to all subcontractors, in all lines, and to their organisations and the activities that the subcontractors perform within the framework of the operator’s activities on behalf of the Employer. Deviations from requirements entail consequences in relation to the type and impact of the consequence. The Contractor who enters into the agreement with the Employer is in turn responsible for ensuring that any subcontractors abide by the requirements and are in this way also the parties at which the the requirements will be directed in the event of a possible deviation.

Requirements are general minimum requirements and therefore do not cover all environmental matters that are dealt with under the terms of a contract. Further requirements that are caused by local or organisation-specific preconditions are added.

Method and technology development are taking place at the same time. The Employer is open to proposals that can give greater environmental benefit or lower the costs of how environmental benefit can be achieved. If the Contractor can offer development alternatives that reduce the environmental impact, the Contractor shall take the initiative for a discussion with the Employer on this subject.

The Employer can allow departures to be made from the requirements in situations in which technical requirements allow it or the environmental benefit from a strict application of requirements does not stand in reasonable proportion to the cost this involves.

This is in the normal case not applicable when it comes to the requirements made regarding chemical products.

Where it is justified, for example within sensitive areas, more stringent requirements are set compared with the basic requirements.

For further information on the purpose of the requirements, system delimitation, follow-up, definitions and explanations, a guideline document has been drawn up. The guideline document is available at the respective Employer organisation websites and may be updated as the requirements are gradually applied and praxis is developed. Further support and assistance can also be found on the websites.

**SYSTEMATIC ENVIRONMENTAL WORK**

1.1a Basic requirements

The Contractor shall, no later than on the signing of the Contract, have systematic environmental work in place which shall be used in order to reduce the environmental impact from the assignment. This shall comprise at least the following items that are to be relevant for those parts of the company’s activities that are on offer.

1. An environmental policy:

* that has been dated and adopted by the management
* that acquires an undertaking for constant improvement

1. Important environmental aspects (environmental impact) for the assignment
2. Environmental goals for the assignment to achieve improvements
3. Routines to guarantee:

* that laws and regulations which affect the operations are adhered to and updated
* that environmental requirements are followed in accordance with the Contract
* risk and deviation management including corrective and preventive measures
* that personnel have the right competence with respect to environmental consideration and energy saving
* Follow-up and reporting to the Employer.

1.1b Selectable requirements

The Contractor shall, no later than on the signing of the Contract, have a structured environmental management system in place which shall be used in order to reduce the environmental impact from the assignment. This shall comprise at least the following items that are to be relevant for those parts of the company’s activities offered

1. An implemented environmental policy
2. Important environmental aspects (environmental impact) for the assignment
3. Environmental goals in order for the assignment to make improvements
4. Routines to guarantee:

* that laws and regulations which affect the operations are adhered to and updated
* that environmental requirements are followed in accordance with the Contract
* risk and deviation management including corrective and preventive measures
* that personnel have the right competence with respect to environmental consideration and energy saving

1. follow-up and reporting to the Employer

**ENVIRONMENT PLAN**

**2.1 Basic requirements**

The Contractor shall draw up a contract-adapted Environment Plan. The plan shall describe how the environmental work will be applied in the work of the Contractor that is carried out on behalf of the Employer, and the operations that are carried out in order to guarantee and strengthen the chances that laws and environmental requirements are met. The Environment Plan may be an integrated part of the Project Plan and shall be submitted to the Employer for review. The Environment Plan shall be agreed on with the Employer and adopted by the Contractor before the commencement of the Contract Works. The plan shall be kept updated and the Employer shall be informed if it is revised. The Environment Plan shall be communicated and known among all personnel concerned on the Contractor’s staff and among its subcontractors so that they can handle the environmental aspects and environmental risks that the tasks require.

The following shall be apparent from the Contractor’s Environment Plan for the assignment:

* a description of the Contractor’s systematic environmental work
* Organisation, environmental responsibilities and authority in the Contract and a person appointed from the Contractor’s project organisation in the role of Contract Environment Coordinator.
* Environmental competence. The Contractor shall report the environmental competence that exists within the project and how it is linked to the activities of the assignment.
* how important environmental aspects (environmental impact), environmental risks and environmental goals for the assignment are dealt with
* how the Contractor will live up to the application of environmental legislation, other requirements and cautionary measures set in official rulings on environmental issues and in environmental requirements imposed in this Contract
* how the Contractor intends to deal with proprietary inspection, i.e. How the environmental work will be followed up against laws and environmental requirements imposed
* how deviation management, including how accidents and near accidents are reported to the Employer
* emergency situation preparedness for environmental accidents and near accidents
* how the internal and external communication of environmental issues is made to the personnel concerned, the Employer, media, authorities and third parties, etc.
* how basic input for the final reporting is handled
* a brief description of the Contract energy consumption
* what type of energy is expected to be used in the Contract Works and an estimate of the anticipated quantities
* how the Contractor intends to improve the energy efficiency of the Contract Works and an estimation of the potential for savings

The Employer may follow up the suppliers’ environmental work, which will be performed against the Environment Plan.

**LIGHT VEHICLES**

**3.1 Basic requirements**

Cars used in road construction contracts with emissions of CO2 higher than 200 g/km shall not be used.

Cars used in road construction contracts that are older than eight (8) years shall not be used.

**3.2 Stricter requirements in sensitive areas**

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of environmental quality standard being exceeded*.

Cars used in road construction contracts with emissions of CO2 higher than 200 g/km shall not be used.

Cars used in road construction contracts that are older than eight (8) years shall not be used.

*From 1 January 2014 – 31 December 2016 the following applies*

**3.3 Basic requirements 2014**

Cars used in road construction contracts with emissions of CO2 higher than 200 g/km shall not be used.

Cars used in road construction contracts that are older than eight (8) years shall not be used.

*From 1 January 2017 the following applies*

**3.4 Basic requirements 2017**

*Cars used in road construction contracts with emissions of CO2 higher than 200 g/km shall not be used.*

*Light Lorries with emissions of CO2 higher than 200 g/km shall not be used*

*Light lorries that are older than eight (8) years shall not be used.*

**HEAVY VEHICLES**

**4.1 Basic requirements**

Heavy vehicles, with the exception of two-way rail vehicles used in and TMA vehicles, shall meet the requirements of Euro III. Subsequent Euro requirements are also permitted.

Heavy vehicles used, which are affected by the requirements, shall be presented in a list (Reg. No., Euro class and type of vehicle) road

**4.2 Stricter requirements in sensitive areas**

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of environmental quality standards being exceeded*.

Heavy vehicles with the exception of two-way rail vehicles, shall meet the requirements of Euro IV. Subsequent Euro requirements shall also be permitted.

Heavy vehicles used, which are affected by the requirements, shall be compiled in a list (Reg. No., Euro class and type of vehicle) road.

*From 1 January 2014 – 31 December 2016 the following applies*

**4.3 Basic requirements 2014**

Heavy two-way rail vehicles and TMA vehicles shall meet the requirements of Euro III. Subsequent Euro requirements are also permitted. Cars used in road construction contracts that are older than eight (8) years shall not be used. Other heavy vehicles shall meet the requirements of Euro IV. Subsequent Euro requirements are also permitted.

Heavy vehicles used, which are affected by the requirements, shall be presented in a list (Reg. No., Euro class and type of vehicle).

*From 1 January 2017 the following applies*

**4.4 Stricter requirements in sensitive areas, 2014**

Heavy two-way rail vehicles and TMA vehicles shall meet the requirements of Euro III. Subsequent Euro requirements are also permitted.

Other heavy vehicles shall meet the requirements of Euro IV. Subsequent Euro requirements are also permitted.

Heavy vehicles used, which are affected by the requirements, shall be compiled in a list (Reg. No., Euro class and type of vehicle).

*From 1 January 2017 the following applies*

**4.5 Basic requirements 2017**

Heavy vehicles shall meet the requirements of Euro IV. Subsequent Euro requirements are also permitted.

Heavy vehicles used, which are affected by the requirements, shall be presented in a list (Reg. No., Euro class and type of vehicle).

**4.6 Stricter requirements in sensitive areas, 2017**

Heavy vehicles shall meet the requirements of Euro IV. Subsequent Euro requirements are also permitted.

Heavy vehicles used, which are affected by the requirements, shall be presented in a list (Reg. No., Euro class and type of vehicle).

**CONSTRUCTION MACHINERY**

* 1. **Basic Requirements**

The engines of construction machinery, apart from the engines of 2-way and rail-mounted road scraper engines, which are covered by EU regulations, shall meet the requirements of Stage I. Subsequent stage requirements are also permitted. The engines of construction machinery, apart from the engines of 2-way and rail-mounted rail engineering works machinery and road scraper engines, which are covered by EU regulations, may be max. 10 years old.

In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.

Used construction machinery that is subject to the requirements shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).

* 1. **Stricter requirements in sensitive areas**

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of environmental quality standards being exceeded.*

The engines of construction machinery, apart from the engines of 2-way and rail-mounted rail engineering works machinery and road scraper engines, which are covered by EU regulations, shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.

The engines of construction machinery, apart from the engines of 2-way and rail-mounted rail engineering works machinery and road scraper engines, which are not covered by EU regulations, shall be max. 6 years old.

In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.

Used construction machinery that is subject to the requirements shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).

*From January 2014 – December 31 2016, the following applies*

* 1. *Basic Requirements 2014*

*The engines of two-way railway engineering works machinery that are covered by EU regulations shall meet the requirements of Stage I. The requirements of subsequent stages are also permitted.* The *engines of construction machinery, apart from the engines of 2-way and rail-mounted rail engineering works machinery and road scraper engines, which are covered by EU regulations, shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.*

*The engines of construction machinery, apart from the engines of 2-way and rail-mounted rail engineering works machinery and road scraper engines, which are not covered by EU regulations, shall be max 10 years old.*

*In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.*

*Used construction machinery that is subject to the requirements shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).*

**5.4 Stricter requirements in sensitive areas**

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of environmental quality standards being exceeded.*

*The engines of two-way railway engineering works machinery that are covered by EU regulations shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.*

*The engines of other diesel-powered construction machinery, with the exception of the engines of rail-mounted engineering works machinery, which are covered by EU regulations, shall meet the requirements of Stage IIIA. Subsequent stage requirements are also permitted.*

*The engines of petrol-powered construction machinery, with the exception of the engines of rail-mounted railway engineering works machinery that is covered by EU regulations shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.*

*The engines of construction machinery, apart from the engines of rail-mounted rail engineering works machinery that are not covered by EU regulations, shall be max. 6 years old.*

*In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.*

*Used construction machinery that is subject to the requirements shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).*

*From 1 January 2017 the following applies*

***5.5 Basic requirements 2017***

The engines of rail-mounted construction machinery and road scraper engines that are covered by EU regulations, shall meet the requirements of Stage I. Subsequent stage requirements are also permitted.

The engines of construction machinery that are not covered by EU regulations may be max. 10 years old.

In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.

Used construction machinery shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).

***5.6 Stricter requirements in sensitive areas, 2017***

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of environmental quality standards being exceeded.*

*The engines of rail-mounted railway engineering works machinery that are covered by EU regulations shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.*

*The engines of other diesel-powered construction machinery that are covered by EU regulations shall meet the requirements of Stage IIIA. Subsequent stage requirements are also permitted.*

*The engines of petrol-powered construction machinery that are covered by EU regulations shall meet the requirements of Stage II. Subsequent stage requirements are also permitted.*

*The engines of construction machinery that are not covered by EU regulations shall be max 6 years old.*

*In the case of construction machinery with engines that are used very infrequently/economically and/or which have a long economic life time, exceptions can be made from the requirements provided the Employer gives his consent.*

*Used construction machinery, which is subject to the requirements, shall be presented in a list (age(of engine), type of machine and EU stage level (EU stage level to be specified for construction machinery with engines that are covered by EU regulations)).*

**FUEL**

**6.1 Basic Requirements**

Diesel fuel and petrol shall meet the requirements of Environmental Class 1 or equivalent

Alkylate fuel shall be used for the engines of petrol-powered construction machinery and appliances/plant in those cases where they are not fitted with catalytic purifiers.

Fuel that contributes to greater energy efficiency and/or improved environmental performance, but which does not fulfil in all respects the requirements of Environmental Class 1, may be used with the consent of the Employer.

**CHEMICAL PRODUCTS**

7.1 Basic Requirements

Chemical products that are to be used on the assignment and which are subject to the demand for marking shall be reviewed by the Employer in accordance with TDOK 2010:310 and TDOK 2010:311. Information on review criteria, exception, notification forms and lists of reviewed products are to be found on the Employer’s home page [www.trafikverket.se](http://www.trafikverket.se).

A review procedure of this type can be initiated in conjunction with the announcement of the Award Decision. However, no decision will be taken on the matter until after the Contract has been signed. In the event that a contract is not entered into, the Contractor is not entitled to receive compensation for work performed.

Note in particular the following requirements from TDOK 2010:310:

* The suppliers shall perform a product selection analysis before an application is submitted to the review organisation
* The products shall have been reviewed before their use commences
* In the case of products that are classified B and C, special conditions as specified in the review notification shall have been fulfilled before use.
* Safety datasheets on chemical products that are used on the assignment shall be available at the site. These safety datasheets shall be up-to-date and in Swedish.

Chemical products and quantities used, and the Employer’s review statement, shall be compiled in a list. The list of chemicals that is drawn up in connection with activities associated with permit-granting or notification activities in accordance with Chapters 9, 11-14 of the Environmental Code must meet requirements pursuant to the Ordinance (1998:901) on the activity operator’s proprietary inspection (FVE).For fuel, the presentation shall be subdivided into different types of fuel.

Chemical pesticide control may not be practised except with the express permission of the Employer.

**7.2 Stricter requirements in sensitive areas**

*Stricter requirements apply in the cities of Gothenburg, Malmö and Stockholm and in other areas where there is a risk of contamination occurring in sensitive natural environments, such as where water in quantities sufficiently large for water supply or in sensitive wetland areas exists.*

*Hydraulic fluids/oils that are used shall meet the environmental property requirements of Swedish Standard SS 155434.*

**MATERIAL AND GOODS/PRODUCTS**

**8.1 Basic Requirements**

Material and goods/products that are provided by the Contractor shall meet the requirements of TDOK 2012:22 ”Material and goods – Requirements and criteria relating to hazardous substances”

The requirements apply for material and goods that are designed and/or built into the installations.

Note in particular the following requirements from TDOK 2012:22:

* Material and goods may not contain substances that appear on the Swedish Transport Administration’s forbidden goods/products list
* Material and goods shall meet BASTA’s property criteria
* If it is not possible to meet BASTA’s property criteria, material and goods that fulfil BASTA’s property criteria shall be prescribed or used instead
* If it is not possible to either fulfil BASTA’s or BETA’s criteria, a product selection analysis and a risk analysis shall be conducted before use. If the risk analysis shows that the use involves acceptable risks, the material or product in question may be used.
* It shall be possible to verify that the criteria can be met by, for example, BASTA registration, a certificate from the supplier or an assessment from an assessment system that is available on the market
* A list of materials shall be included in the final documentation. From this material list it shall be clear which materials meet the BASTA criteria, the BETA criteria and which of them meet neither the BASTA nor the BETA criteria. Product selection analyses and risk analyses for material that meets neither the BASTA nor the BETA criteria shall be enclosed with the material list.

The Swedish Transport Administration’s prohibited product/material list, criteria, minimum requirements for product selection analysis, risk analysis and material list have been decided in TDOK2012:22 that can be accessed at [www.trafikverket.se](http://www.trafikverket.se) together with model forms checklists and other aids.