

Four Points on Point Four Implementing Environmental Quality Standards in Sweden

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This article deals with Sweden's implementation of 'Environmental Quality Standards' (EQS). My starting point is the Swedish legal understanding of this instrument and my intention is to show how it has, to some degree, been affected and limited by terminology. In order to be able to implement the different kinds of requirements that the EU might come up with, the Swedish environmental code on EQS contains a 'point four' in section 2 of chapter 5; making it possible to adopt all kinds of EQS as long as they follow from Sweden's obligations due to the EU membership. The purpose was to make it possible to legally handle future requirements from the EU. However; as I will show below, this 'point four' is a plausible explanation to the difficulties in implementing the Water Framework Directive¹ and to Swedish lawyers' difficulties in agreeing on what the resulting national legislation requires from national authorities and actors.

First of all, I intend to discuss the concept of EQS – then I will explain the four points in chapter 5, section 3 of the Swedish Environmental code; describe them and the reasons behind them. Then, I will describe the Swedish implementation of two directives that has resulted in national, Swedish, EQS (the *directive on ambient air quality and cleaner air for Europe* (the Air quality directive, AQD)², the *Water Framework Directive* (WFD)). There are other directives prescribing a certain environmental quality (e.g. the habitat directive³, the noise directive⁴ and the Marine Strategy Framework Directive⁵) though directives resulting in *EQS according to Swedish national legislation* (EQS-S) are limited to the AQD, the WFD, the MSFD and the noise directive. The reason why I have chosen the AQD and the WFD is that both of them contain different kinds of requirements and both of them are implemented in Swedish national legislation though in different ways, which is why they are interesting to compare. Also, there is case law on the implementation of them. Finally I will discuss why the provision, adopted in order to be able to fulfil EU obligations, has made it difficult to fully implement directive requirements.

1 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

2 Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

3 Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

4 Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise.

5 Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy.

1 EQS in the EU

EQS is a difficult concept in so far that there is no real common understanding of what an EQS really is. EU has adopted a number of directives with objectives for the environmental status and several studies related to the implementation indicate major difficulties; mainly due to different perceptions on what the directive actually requires.⁶ It should be pointed out the Environmental Quality Standards are only mentioned in the directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) (the IED), the WFD and the directive 2008/105/EC on environmental quality standards in the field of water policy (the daughter directive). These directives regulating environmental quality have different definitions on what to be achieved, for example 'limit value', 'critical level', 'target value', 'alert threshold', 'upper assessment threshold', 'average exposure indicator', 'average exposure indicator' etc. In order to find the obligations that follow from a directive, the key is to identify the directive's requirements no matter what it is called; the requirements are legally binding, provided that the Directive is sufficiently clear. From this perspective it is rather uninteresting to analyse the concept of EQS. Instead, it might be useful with a brief review of how 'environmental quality' is defined in the IED, the WFD and the daughter directive; not in order to analyse the concept in bits and pieces but to illustrate the differences.

On January 7, 2014, a number of directives will be repealed by the IED⁷, namely five sectorial directives; three on waste from the titanium dioxide industry⁸, directive 1999/13/ on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, directive 2000/76/EC on the incineration of waste and directive 2008/1/EC concerning integrated pollution prevention and control (the IPPC-directive). With effect from 1 January 2016 directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants is also repealed by the IED.⁹ The IED lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where this is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.¹⁰ The IED applies to the industrial activities giving rise to pollution

6 See for example C. Backes; T. van Nieuwerbrugh; RBA Koelemeijer; *Transformation of the first daughter directive on air quality in several EU member states and its application in practice*, [2005] *EELR*, 157-164 (on the air quality directive) and Krämer, Ludwig; *EU Environmental Law*, seventh edition, (Sweet & Maxwell:2011), s. 256 (on the WFD).

7 IED, Article 81.

8 Directives 78/176/EEC, 82/883/EEC, 92/112/EEC,

9 IED, Article 81.

10 IED, Article 1.

referred to in Chapters II to VI;¹¹ however, it does not apply to research activities, development activities or the testing of new products and processes.¹²

The IED defines ‘environmental quality standard’ as the set of *requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Union law.*¹³ The existence of environmental quality standards is important to the industrial activities covered by the IED; under article 18 it follows that *[w]here an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards.*¹⁴

Article 18 is found in chapter II of the IED, which to a large extent corresponds to the IPPC-directive. Chapter II applies to the activities¹⁵ set out in Annex I and, where applicable, reaching the capacity thresholds set out in that Annex.¹⁶ Member States shall provide that those installations are operated in accordance with certain principles, inter alia that all the appropriate preventive measures are taken against pollution and that the best available techniques are applied.¹⁷ The IED also requires the Member States to take measures to ensure that an application for a permit includes certain descriptions.¹⁸ Member States shall then ensure that the permit includes all measures necessary (some measures that at least should be included are given) for compliance with the requirements of Articles 11 (the principles) and 18.¹⁹

The conclusion that can be drawn about the provisions on environmental quality standard in the IED is thus that for installations covered by the Directive's Annex I, additional measures than those achievable by the use of best available technique shall be included in the permit, if it is needed to meet requirements that must be fulfilled at a given time in a given environment or particular part thereof, as specified in Union legislation. Nothing is mentioned about what kind of requirement it should be (‘limit value’, ‘critical level’, ‘target value’ etc.), only that when dealing with...

11 IED, Article 2.1.

12 IED, Article 2.2.

13 IED, Article 3.6 This is equivalent to the definition given in the IPPC-directive, Article 2.7

14 IED, Article 18. Also this provision has its equivalent in the IPPC-directive, namely in its Article 10.

15 The activities are for example energy industries; refining of mineral oil and gas, production and processing of metals, mineral industry, chemical industry and waste management.

16 IED, Article 10.

17 IED, Article 11.

18 IED, Article 12.

19 IED, Article 14.

1. a set of requirements
2. which must be fulfilled at a given time
3. by a given environment or particular part thereof,
4. as set out in Union law

...it is a matter of an EQS for the purposes of the IED and *additional measures shall be included in the permit* when needed. However; those standards are linked to the *qualitative characteristics* of the elements protected; the national emission ceilings laid down by the NEC Directive²⁰, for instance, do not involve such characteristics, since those ceilings refer to the total quantity of polluting substances that can be discharged into the atmosphere and not to specific qualitative requirements.²¹

The other directives defining EQS are the WFD and its daughter directive. The definition in this directive is very narrow: ‘Environmental quality standard’ means the concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment.²²

Thus; the definition gives us the meaning of the words, when used in the WFD. There have been some discussions on the meaning of “should not be exceeded”; however the language versions of the directive are different; the French version reads “la concentration d'un polluant ou d'un groupe de polluants dans l'eau, les sédiments ou le biote qui *ne doit pas* être dépassée” [my emphasis] and the German reads “die Konzentration eines bestimmten Schadstoffs oder einer bestimmten Schadstoffgruppe, die in Wasser, Sedimenten oder Biota aus Gründen des Gesundheits- und Umweltschutzes *nicht überschritten werden darf*” [my emphasis] Thus, I would not read too much in to the wording, especially not when reading it in the light of the rest of the directive; that is the provisions on determining good surface water chemical status and the general requirements in article 4.²³

The EQS in the WFD are relevant when it comes to characterise surface water chemical status. Surface water chemical status can be either ‘good’ or ‘failing to achieve good’. ‘Good surface water chemical status’ means the chemical status required to meet the environmental objectives for surface waters established in Article 4(1)(a), that is the chemical status achieved by a body of surface water in which concentrations of pollutants do not exceed the

20 Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants.

21 Joined Cases C-165/09 to C-167/09, para. 61 and 62.

22 WFD, Article 2.35.

23 See also L. Gipperth; *Ramdirektivet för vatten- ett framsteg för skyddet av unionens vattenresurser* in Basse, E.M. et al. (eds); *Fågelperspektiv på rättsordningen: Vänbok till Staffan Westerlund* (Iustus förlag: 2002), p. 482, who comes to the same conclusion, based on an interpretation in the light of WFD, Article 22. 4 in combination with the IPPC-directive (now the IED).

environmental quality standards established in Annex IX and under Article 16(7) (now found in the daughter directive), and under other relevant Community legislation setting environmental quality standards at Community level.²⁴

The purpose of EQS in the WFD and its daughter directive is thus primarily an instrument to characterize surface water. In other words; in order to be characterised as ‘good’, the chemical status must meet the environmental objectives for surface waters established in Article 4(1)(a), that is the chemical status achieved by a body of surface water in which concentrations of pollutants do not exceed the concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment established in Annex IX and under Article 16(7) (now found in the daughter directive), and under other relevant Union legislation setting environmental quality standards at Union level.²⁵ Thus; the EQS in the WFD sets the standard for good surface water chemical status. And that is all it does.

Those EQS, used for setting the standard, may be decided either on EU-level or on national level; depending on what substances they apply to. Depending on whether the body of water meets the standards it is characterised as ‘good’ or ‘failing to achieve good’. Thus; indirectly the EQS is determining the setting of environmental requirements in the member states; however – the EQS only determines the requirements indirectly. The real requirements are found in the directive’s article 4 that prescribes that the Member States shall achieve good surface water status in its different kind of water bodies in 2015. Good surface status means the status achieved by a surface water body when both its ecological status and its chemical status are at least ‘good’.²⁶ So; in the WFD the EQS is used determining whether the chemical status is good or not.

As I will show in the following, there is no uniform legal concept on EQS within the EU. It is nothing more than the meaning of the words within its context; Environmental Quality Standards and those standards can be used in different ways in different directive. Nonetheless; in the IET they have a very specific legal meaning but that is only for the purposes of the IED though different environmental requirements might fall within that purpose, whatever they are called, as long as they establish...

1. a set of requirements
2. which must be fulfilled at a given time

24 WFD, Article 2.24.

25 The Swedish Environmental Protection Agency (*Naturvårdsverket*) recognized the character of the EQS in the WFD and its daughter directive and suggested that instead of using the EQS when discussion it in this context, we should use the term ‘class boundaries’ since this is what they are used as during the characterisation phase. *Naturvårdsverket; Förslag till genomförande av direktiv 2008/105/EG om miljö kvalitetsnormer inom vattenpolitikens område*, rapport 5973 (June 2009) pp. 10.

26 WFD, Article 2.18.

3. by a given environment or particular part thereof,
4. as set out in Union law.

2 Chapter 5 Section 2: the Four Points

According to the Swedish environmental code, the Government may issue rules with respect to certain geographical areas, to specific biotopes or to the country as a whole concerning the quality of land, water, air or the environment in general if this is necessary in order to provide lasting protection for human health or the environment or to remedy adverse effects on human health or the environment. Those rules are called ‘environmental quality standards’.²⁷ The Government may instruct a public authority to issue environmental quality standards arising out of Sweden’s membership of the European Union.²⁸

Chapter 5, section 2 gives four types of environmental quality standards: ‘limit values’ which may not be exceeded (point one), ‘target values’ to strive for and which ought not to be exceeded (point two), ‘indicators’ which show the occurrence in surface water and groundwater of organisms that can serve as indicators of the state of the environment (point three). Finally, the type ‘other norms’ defines environmental quality requirements resulting from Sweden’s membership of the European Union (point four).

Point 4 gives the impression of being something of a “catchall”; requirements that the EU may come to formulate, but which do not fall under points one to three. The governmental bills, drafting the section, justify point four by stating that there is no uniform terminology for environmental quality found in the directives specifying environmental standards.²⁹ Thus; if an environmental quality status is conferred by EU law, but has not the character of ‘limit value’ nor of a ‘target value’ or of an indicative norm, it shall be assigned to the fourth category. The earlier version of the section was more detailed in its definition of an EQS (below, I will use EQS-S to emphasise that I’m referring to an EQS under Swedish law and not according to EU-law or in general). However; it was considered as too specific to cover the various types of provisions on environmental quality that is needed in order to implement requirements according to EU law.³⁰ Viewed in the lights of the requirements that the EU Court clearly expressed in the *TA Luft* –cases³¹, the new

27 Environmental code, chapter 5 section 1 and the government bill 1997/98:45, *Miljöbalk*, p. 252.

28 Environmental code, chapter 5 section 1, para 2.

29 Government bills 2003/04:2 p. 22 and 2009/10:184 p. 40.

30 Government bill 2003/04:2 p. 22.

31 C-361/88, *TA Luft I* and C-59/89 *TA Luft II*.

construction is very reasonable since directives must be legally incorporated.³² Through point four there is an opportunity given to implement legally binding standards on whatever the EU might formulate in the future. The main consequence of whether an EQS-S is adopted due to one of the different points (one, two, three or four) is how the chapter 2 section 7, *the second paragraph* of the environmental code is applied.

According to chapter 2, section 7, the *first paragraph* in the environmental code, a balancing shall take place; the principle of proportionality must be applied. While there is an obligation to take appropriate preventive measures against pollution and to apply the best available techniques this obligation may not be disproportional. The benefit needs to outweigh the costs of such measures.³³ Nevertheless; it is important that the result, after applying the principle of proportionality, does not conflict the provision in chapter 1 section 1 of the environmental code and thus the purpose of the code:

The purpose of this Code is to promote sustainable development which will assure a healthy and sound environment for present and future generations. Such development will be based on recognition of the fact that nature is worthy of protection and that our right to modify and exploit nature carries with it a responsibility for wise management of natural resources.

Then there is chapter 5, section 7, *the second paragraph*, which prescribes that despite the first paragraph, requirements needed to comply with an EQS-S according to the chapter 5, section 2, first paragraph, point one, shall be made. Thus; 'limit values' are supposed to be complied with, no matter whether the activities are subject to permits or not. What is important in the paragraph is *compliance* with the 'limit values'; this also means that considerations shall be taken as soon as possible although the deadline to keep them has not been reached yet which means that an authority (regulatory or permit giving) does not need to wait until after the implementation time before passing an order; it is enough with a *risk* that it might not be complied with in the future.³⁴ This possibility to consider the EQS-S, although it does not need to be achieved until several years in the future complies well with dictums from the EU-court; even before the date on which the implementation period expires, Member

32 C-361/88 *Commission v. Federal Republic of Germany* (T/A Luft), See discussion in e.g. J. H. Jans and H.H.D. Vedder; *European Environmental Law*, (Groningen:2011), pp. 149.

33 The provision is discussed in G. Michanek; *Att väga säkert och vikten av att säkra* in Basse, E.M. et al. (eds); *Fågelperspektiv på rättsordningen: Vänbok till Staffan Westerlund* (Iustus förlag: 2002), p. 69-91. See also G. Michanek and C. Zetterberg; *Den svenska miljörätten*, (Iustus Förlag: 2012), p. 126 See also the Swedish Government Official Reports 2005:113 *Åtgärdsprogram för miljö kvalitetsnormer*, pp. 65.

34 Government bill 2009/10:184 p. 74, see also Handbook of the Environmental Protection Agency 2011:1; *Luftguiden Handbok om miljö kvalitetsnormer för utomhusluft*, s. 28 and guidance from the Environmental Protection Agency; *Vägledning om tillämpning av miljö kvalitetsnormer och åtgärdsprogram för vatten inom tillsynsarbetet*, 2011-04-29, p. 34.

States have to refrain from taking any measures liable to seriously compromise the attainment of the result prescribed by a directive.³⁵

From this follows that only 'limit values' according to point one, has a certain legal consequence. The reason why this consequence is specific to standards following from point one is to be found in the government bill; it must be a difference in consequences between a 'limit value' and a 'target value' because of the Members States' responsibility concerning a 'limit value'. It is argued in the bill, that in the case of 'limit values', the only possibility for a Member State that doesn't reach the prescribed result, to avoid being in breakage of its obligation, is to use the prescribed exceptions in the directive or to claim that it was absolutely physically impossible to comply with such a 'limit value'. This is why it is necessary with legal consequences following from point one; and also why it should be limited in its application to 'limit values'.³⁶ The necessity of having such legal consequences also follows from the IED (article 18). The Governmental Report³⁷, conducted because of IED replacing the IPPC-directive, concluded that provisions fulfilling the requirements of IED, article 18, were already implemented in Swedish law.³⁸

This is not unproblematic; according to chapter 2, section 7, the second paragraph, it is only possible to require more than the best available technology when there is an EQS-S that follows from chapter 5 section 2, first paragraph, point one. However; as I will show below, there are EQS-S with *the character* of a 'limit value', which follows from chapter 5 section 2, first paragraph, point four (based on the membership in the EU).

3 Requirements when Implementing Directives

Below I will, very briefly, make an overview of the obligations following from *The Air Quality Directive*³⁹ (the AQD) and *The Water Framework Directive*⁴⁰ (the WFD) and the Swedish implementation of those directives. My purpose is to map the obligations following from the directive directly and indirectly (i.e. via the IED) and according to which point in chapter 5 section 2 the first paragraph in the Swedish environmental code the obligations have implemented an EQS.

35 See e.g. C-129/96, *Inter-Environnement Wallonie ASBL*, para. 45 and C-43/10 *Nomarchiaki Aftodioikisi Aitoloakarnanias* m.fl para. 60.

36 Government bill 2009/10:184 s. 43 and 46.

37 Swedish Government Official Reports (SOU) 2011:86 *Bättre miljö – minskade utsläpp*.

38 Swedish Government Official Reports (SOU) 2011:86 *Bättre miljö – minskade utsläpp* p. 175.

39 Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

40 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

Implementing environmental quality requirements from a directive involves at least two necessary considerations;

- the obligations following from the directive must be implemented
- if the environmental quality requirement constitutes an EQS within the purpose of the IED, the national law must ensure that additional measures are included in a permit if an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques.

This applies to activities covered by chapter II in the IED.

When it comes to implementing environmental requirements put out in directives the *EU Court of Justice* (the ECJ) has been rather active. There are several cases where the court has approached the obligations of a Member State when implementing directives in general and directives with environmental activities especially. According to consistent case-law:

- The provisions of directives must be implemented with *unquestionable binding force*, and the specificity, precision and clarity necessary to satisfy the requirements of legal certainty. Legislation, made public, is one way to implement with *unquestionable binding force*.⁴¹ Mere administrative practices, which by their nature are alterable at will by the administration and are not given the appropriate publicity, cannot be regarded as constituting the proper fulfilment of a Member State's obligations.⁴² In the so called *TA Luft- cases*⁴³ the ECJ made clear that if a directive prescribes a certain environmental quality in the entire territory it is not sufficient to regulate only certain sources; the legal requirement must cover the entire territory.⁴⁴ The court stated that:

“The general nature of the directive cannot be satisfied by a transposition confined to certain sources of the exceeding of the limit values which it lays down and to certain measures to be adopted by the administrative authorities.”⁴⁵

41 See e.g. C-339/87 *Commission v. Kingdom of the Netherlands* para. 7.

42 C-159/99 *Commission v. Italian Republic*, para 32 and C-415/01 *Commission v. Kingdom of Belgium* para 21 and C-83/97 *Commission v. Federal Republic of Germany*.

43 C-361/88, *TA Luft I* och C-59/89 *TA Luft II*.

44 Case C-361/88 *Commission v. Federal Republic of Germany (T/A Luft)*, para. 9. See discussion in e.g. Jans, Jan H. och Vedder, Hans, H.D.; *European Environmental Law*, (Groningen:2011), p. 149 f., see also Case C-65/00 *Commission v. Italian Republic* and C-96/81 *Commission v. Kingdom of the Netherlands*.

45 Case C-361/88 *Commission v. Federal Republic of Germany (T/A Luft)*, para. 19.

- The principle of legal certainty requires *appropriate publicity* for the national measures adopted pursuant to Community rules in such a way as to enable the persons concerned by such measures to ascertain the scope of their rights and obligations.⁴⁶

Where the relevant provision of the directive seeks to *create rights for individuals*, the legal situation arising from those principles is *sufficiently precise and clear* and that the persons concerned are put in a position to know the full extent of their rights and, where appropriate, *to be able to rely on them before the national courts*.⁴⁷

4 Air Quality and Water Quality

Below, when I discuss the national implementation I will (briefly) consider the *unquestionable binding force*, the *specificity, precision and clarity* necessary to satisfy the requirements of legal certainty, (including the *appropriate publicity* and that the legal outcome is *sufficiently precise and clear*) however, I will *not* discuss whether the directive seeks to *create rights for individuals* and whether individuals are *able to rely on them before the national courts*. Discussing this would broaden the scope of the article too much; especially when it comes to national implementation, and it has no direct bearing on the discussions concerning chapter 5, section 2, the first paragraph in the Swedish environmental code. Thus; when describing the obligations in the directive, I will only focus on the IED requirements since the general requirements on implementation of directives are *general*.

4.1 Air

The AQD and its daughter directive⁴⁸ deals with many types of values, ‘limit values’, ‘critical levels’, ‘target values’, ‘long-term objectives’, ‘national exposure reduction target’ and ‘exposure concentration obligation’.

‘*Limit value*’ is defined as a level⁴⁹ with the aim of avoiding, preventing or reducing harmful effects on human health or the environment as a whole, to be attained within a given period and not to be exceeded once attained.⁵⁰ The limit

46 See e.g. Case C-313/99 para. 51-53 and Case C-415/01, *Commission of the European Communities v. Kingdom of Belgium*, para 21.

47 See e.g. C-32/05 *Commission v. Grand Duchy of Luxemburg*, para. 34.

48 Directive 2004/107/EC of the European parliament and of the council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.

49 According to the definition in the directive ‘level’ shall mean the concentration of a pollutant in ambient air or the deposition thereof on surfaces in a given time (AQD Article 2.3).

50 AQD Article 2.5.

values are regulated in article 13 and Member States shall ensure that, throughout their zones and agglomerations, levels of sulphur dioxide, PM10, lead, and carbon monoxide in ambient air do not exceed the limit values laid down. In respect of nitrogen dioxide and benzene, the limit values specified may not be exceeded from the dates specified. Member States must ensure that these limit values are kept.⁵¹ Concerning the IED we are looking at environmental requirements which 1) is a set of requirements, 2) which must be fulfilled at a given time, 3) by a given environment or particular part thereof, 4) as set out in Union law. Thus; according to IED Member States also need to make sure that if an installation is covered by chapter II in the IED and a limit value requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit.

Sweden has implemented limit values for the mentioned substances in a Government Ordinance; *Luftkvalitetsförordning* (2010:477)⁵². Sometimes the EQS-S is slightly more ambitious than what the limit-values in the directive requires, which is acceptable since the legal base of the directive is article 175 of the EC-treaty (equivalent to article 192 in the TFEU). Since it is a governmental ordinance it is public, the legally binding force is unquestionable. All of the limit values are clearly written for each substance, which makes the rules precise and clear. Thus; Sweden has fulfilled the requirements for having transposed the limit values to national law. Unfortunately, the situation is not that positive when it comes to actually achieving the result. In May 2011, the ECJ announced a judgment⁵³ in which the court held that Sweden had failed to fulfil the obligation concerning the limit values for concentrations of PM10 in ambient air.⁵⁴ In December 2011 the Commission, once again, made clear that Sweden is failing to fulfil the obligations according to articles 13 and 23 of the AQD concerning PM10. The Commission also stated that the infringement had been of a continuous nature.⁵⁵ The Swedish government confirmed the exceeding of limit values.⁵⁶

51 Due to the 'margin of tolerance'; the percentage of the limit value by which that value may be exceeded subject to certain conditions laid down in the Directive, the limit value might be flexible to a certain degree. Krämer points out that the existence of "margins of tolerance" seen together with the definition of 'limit value' itself which provide that it may not be exceeded for more than a certain number of days per calendar year means that it is not an absolute limit. (Krämer, Ludwig; *EU Environmental Law*, seventh edition, (Sweet & Maxwell:2011), p. 282). I would rather put it as the real limit is the expressed value plus "margin of tolerance".

52 Government Ordinance on Air Quality.

53 C-479/10 *Commission v. Kingdom of Sweden*.

54 In the past, the Commission has successfully also taken Italy, Portugal and Slovenia to Court for failing to ensure good air quality for citizens. The full list, 2013, of Member States concerned by PM10 exceedances is Austria, Belgium, Bulgaria, the Czech Republic, Germany, Greece, Spain, France, Italy, Hungary, Latvia, Portugal, Poland, Romania, Sweden, Slovakia and Slovenia (European Commission - IP/13/47; 24/01/2013)

55 Letter of formal notice concerning European Parliament and Council Directive 2008/50/EC on ambient air quality and cleaner air for Europe (2804/11/ENVI).

56 Answer of the Swedish government, M2011/3820/R, of February 15, 2012.

Once again the Commission approached Sweden concerning PM10 and the Swedish government answered in June 2013. This answer has been criticised by the Swedish Society for Nature Conservation (*Naturskyddsföreningen*) for only presenting digits from 2012, a year that was favourable due to extensive rainfall; new figures from the first six months of 2013 shows that the situation is already worse than in all of 2012.⁵⁷ Concerning the IED-directive, Sweden has implemented the limit values as EQS-S according to the Swedish environmental code, chapter 5, section 2, first paragraph, point one, which means that it is possible with additional measures.

'Critical level' is defined as a level fixed on the basis of scientific knowledge, above which direct adverse effects may occur on some receptors, such as trees, other plants or natural ecosystems but not on humans.⁵⁸ Member States shall ensure compliance with the critical levels for sulphur dioxide (20 $\mu\text{g}/\text{m}^3$ during the averaging period 1 October to 31 March) and oxides of nitrogen (30 $\mu\text{g}/\text{m}^3$ NO_x) per calendar year.⁵⁹ The same discussion as the one above is relevant for the 'critical level' and thus the Member States must ensure that the limits are kept and also comply with the IED. The Swedish implementation is through the same governmental ordinance and also as an EQS-S according to the environmental code, chapter 5, section 2, first paragraph, point one, which means that it is possible with additional measures.

'Target value' is defined as a level fixed with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained where possible over a given period.⁶⁰ Member States shall take all necessary measures not entailing disproportionate costs to ensure that concentrations of PM2,5 in ambient air do not exceed the target value;⁶¹ 25 $\mu\text{g}/\text{m}^3$ per calendar year. The 1st of January 2010 was the date by which target value should be met.⁶² There is also a target value for ozone.⁶³ For the protection of human health the target value for ozone is 120 $\mu\text{g}/\text{m}^3$ as a maximum daily eight-hour mean, which is not to be exceeded on more than 25 days per calendar year averaged over three years. For the protection of vegetation, the target value is AOT40⁶⁴ (calculated from 1 h values): 18 000 $\mu\text{g}/\text{m}^3 \cdot \text{h}$ averaged over five year. Both targets should have

57 See SSNC:s opinion (2013-08-19) on the Swedish government's answer of the 26th of June 2013 concerning the infringement matter no. 2912/2216.

58 AQD Article 2.6.

59 AQD, Article 14 and Annex XIII. There are no "margin of tolerance" concerning the critical levels.

60 AQD Article 2.9.

61 AQD, Article 16.1.

62 AQD, section D of Annex XIV.

63 AQD, Article 17.1.

64 AOT40 (expressed in $(\mu\text{g}/\text{m}^3) \cdot \text{hours}$) means the sum of the difference between hourly concentrations greater than 80 $\mu\text{g}/\text{m}^3$ (= 40 parts per billion) and 80 $\mu\text{g}/\text{m}^3$ over a given period using only the one-hour values measured between 8.00 and 20.00 Central European Time (CET) each day. (AQD, section A of Annex VII).

been met the 1st January 2010.⁶⁵ The definition implies that the target should have been achieved in a certain time, except in cases where it would require disproportional measures. Thus, it requires Member States to take all reasonable measures to achieve the target and if they fail, it is possible to be excused if all reasonable measures, though not the disproportionate ones, had been taken. The interpretations and limits of ‘reasonable’ and ‘disproportionate’ will be for the Court to give. In light of the evaluation and assessment needed to consider the proportionality it is probably not that kind of requirement that will trigger the Industrial Emissions Directive’s article 18; it is more likely that the assessment will end up in something that resembles best available techniques. In this case, Sweden has used the point two in chapter 5, section 2, paragraph one. Thus; the EQS-S is labelled ‘target value’ also according to Swedish law.

‘*Long-term objective*’ means a level to be attained in the long term, save where not achievable through proportionate measures, with the aim of providing effective protection of human health and the environment⁶⁶ and according to article 17 in the AQD, Member States shall take all necessary measures not entailing disproportionate costs to ensure that long-term objectives are attained. The long-term objectives for ozone are specified as 120 µg/m³ as maximum daily eight-hour mean within a calendar year for the protection of human health. For the protection of vegetation the long-term objective for ozone is 6 000 µg/m³· h as AOT40 (calculated from 1 h values) during the averaging period May to July. The date by which the long-term objectives should be met is expressively not defined.⁶⁷ However; where concentrations of ozone have exceeded the long-term objectives, fixed measures shall be taken.⁶⁸ Thus; the IED, article 18, is not applicable; there is no date by which the long-term objectives should be reached and thus the definition of an EQS in IED, article 10 is not met. The long-term objective is implemented as the wording of the directive and also here the reference is to point two of chapter 5, section 2 in the environmental code; in Swedish law we are dealing with EQS-S as ‘target values’.

‘*National exposure reduction target*’ means a percentage reduction of the average exposure of the population of a Member State set for the reference year with the aim of reducing harmful effects on human health, to be attained where possible over a given period.⁶⁹ Member States shall take all necessary measures not entailing disproportionate costs to reduce exposure to PM_{2,5} with a view to attaining the national exposure reduction target. The exposure reduction target, which should be met in 2020, is relative to the AEI in 2010, meaning that the reduction is evaluated against the Average Exposure Indicator

65 AQD, section B of Annex VII:

66 AQD Article 2.14.

67 AQD, Section C of Annex VII

68 AQD, Article 9.

69 AQD Article 2.22.

(AEI)⁷⁰, which will serve as a measure of population exposure. The national exposure reduction target will thus depend on the AIE 2010:⁷¹

Exposure reduction target relative to the AEI in 2010	
Initial concentration in $\mu\text{g}/\text{m}^3$	Reduction target in per cent
<8,5 = 8,5	0
>8,5->13	10
=13-<18	15
=18-<22	20
≥ 22	All appropriate measures to achieve 18 $\mu\text{g}/\text{m}^3$

As pointed out in the discussion above, the wording indicates that it's not within the scope of the IED, article 18; at least not if the AEI2010 is not ≥ 22 . In Sweden, the Environmental Protection Agency (*Naturvårdsverket*) should establish the average exposure of the population of particles (PM_{2.5}, 5).⁷² According to *Naturvårdsverket*, calculations based on measurements during 2009 – 2011 gives an average exposure of 6.6 g/m^3 , which means that Sweden already meets the requirements for an acceptable exposure level (<8.5 $\mu\text{g}/\text{m}^3$) with for PM_{2.5}.⁷³ The EQS-S is according to the environmental code, chapter 5, section 2, point two; a 'target value'.

'Exposure concentration obligation' means a level fixed on the basis of the average exposure indicator with the aim of reducing harmful effects on human health, to be attained over a given period.⁷⁴ Member States shall ensure that the average exposure indicator for the year 2015 does not exceed the exposure concentration obligation.⁷⁵ The average exposure indicator (AEI) shall be based upon measurements in urban background locations throughout the territory of a Member State. It should be assessed as a three-calendar year

70 The Average Exposure Indicator expressed in $\mu\text{g}/\text{m}^3$ (AEI) is explained in directive 2008/50/EC, annex XIV, and shall be based upon measurements in urban background locations in zones and agglomerations throughout the territory of a Member State. It should be assessed as a three-calendar year running annual mean concentration averaged over all sampling points established pursuant to Section B of Annex V. The AEI for the reference year 2010 shall be the mean concentration of the years 2008, 2009 and 2010.

71 AQD, Section B of Annex XIV.

72 Luftkvalitetsförordning (2010:477) 28 §, p. 4.

73 *Naturvårdsverket's* web page; "www.naturvardsverket.se/Sa-mar-miljon/Statistik-A-O/Partiklar-i-luft-PM25-i-urban-bakgrund/" last visited August 17, 2013.

74 AQD Article 2.21.

75 AQD, Article 15.2.

running annual mean concentration averaged over all sampling points⁷⁶ and the AEI for the year 2015 shall be the three-year running mean concentration averaged over all those sampling points for the years 2013, 2014 and 2015.⁷⁷ The exposure concentration obligation, which is to be met in 2015, is 20 $\mu\text{g}/\text{m}^3$.⁷⁸ This is a clear EQS pursuant to the IED; there is a requirement for a specific environment, which is to be met within a certain time. The Swedish provision on EQS-S is according to the environmental code, chapter 5, section 2, point one; ‘a limit value’.

Then there are ‘alert threshold’ and ‘information threshold’; both relating to obligations to alert or inform the public. ‘Upper assessment threshold’ as well as ‘lower assessment threshold’ relate to measurement requirements.⁷⁹ Thus; none of them actually focus on the environmental quality, they only give instructions on how different concentrations affect obligations to take certain action.

In the AQD:s daughter directive⁸⁰ the objectives, relevant to air quality, are to establish a target value for the concentration of arsenic, cadmium, nickel and polycyclic aromatic hydrocarbons (benzo(a)pyrene is used as a marker for the carcinogenic risk of polycyclic aromatic hydrocarbons) in ambient air so as to avoid, prevent or reduce harmful effects of the relevant substances on human health and the environment as a whole and to ensure, with respect to the substances, that ambient air quality is maintained where it is good and that it is improved in other cases.⁸¹ In article 3, target values are established; Member States shall take all necessary measures not entailing disproportionate costs to ensure that, as from 31 December 2012, concentrations of arsenic, cadmium, nickel and benzo(a)pyrene, in ambient air do not exceed the target values, calculated as the total content in the PM10 fraction averaged over a calendar year: arsenic; 6 ng/m^3 , cadmium; 5 ng/m^3 , nickel; 20 ng/m^3 and benzo(a)pyrene; 1 ng/m^3 . The same discussion applies as above concerning the wording “all necessary measures not entailing disproportionate costs”; thus it is probably not a matter of EQS for the purpose of the IED. In Swedish law the target values are implemented through the same ordinance as the one implementing the AQD; all target values in the daughter directive are implemented as EQS-S formulated as target values following chapter 5, section 2 first paragraph, point two in the environmental code.

76 Sampling points are established pursuant to Section B of Annex V.

77 AQD, section A of Annex XIV.

78 AQD, section C of Annex XIV.

79 AQD Article 2. 10-13.

80 Directive 2004/107/EC of the European parliament and of the council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.

81 Directive 2004/107/EC, Article 1.

4.2 Water

The purpose of this Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. This is supposed to *inter alia* prevent further deterioration and to protect and enhance the status of aquatic ecosystems, to promote sustainable water use, ensure the progressive reduction of pollution of groundwater and prevent its further pollution, and contribute to mitigating the effects of floods and droughts.⁸²

According to article 4 the Member States shall, in making operational the programmes of measures specified in the river basin management plans, implement *all the necessary measures to*:

- prevent deterioration of the status of all bodies of surface water.
- prevent or limit the input of pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater.
- with the aim of progressively reducing pollution from priority substances and ceasing or phasing out emissions, discharges and losses of priority hazardous substances.
- to reverse any significant and sustained upward trend in the concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution of groundwater.

The Member States shall also:

- protect, enhance and restore all bodies of surface water with the aim of achieving good surface water status at the latest 22 December 2015 (extensions possible but subject to conditions in the directive⁸³).
- protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving good ecological potential and good surface water chemical status at the latest the 22 December 2015 (extensions possible but subject to conditions in the directive).
- protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge of groundwater, with the aim of achieving good groundwater status at the latest 22 December 2015 (extensions possible but subject to conditions in the directive).

82 WFD, Article 1.

83 The deadlines may be extended for the purposes of phased achievement of the objectives for bodies of water, provided that no further deterioration occurs in the status of the affected body of water when *all* of the given conditions in the directive are met.

- for protected areas; achieve compliance with any standards and objectives at the latest the 15 December 2015 unless otherwise specified in the Community legislation under which the individual protected areas have been established.

Under certain conditions laid down in article 4, Member States may designate a body of surface water as artificial or heavily modified. Thus; the main rule gives that a certain result shall be achieved on 15 December 2015, at the latest, unless the possibilities to extend the time limit until 2021 or 2027 are used.⁸⁴

Concerning the obligation to prevent deterioration, there is no time limit specified in the directive. Krämer discusses from when this prohibition of deterioration applies; since 2000 (date of adoption of the directive, 2003 (date of its final transposition into national law), since 2008 (beginning of monitoring of surface water according to article 8) or 2012 (date of the beginning of measures according to article 12).⁸⁵ In C-43/10 the referring court sought to ascertain whether the WFD must be interpreted as precluding a provision of national law whereby consent is given for a measure, prior to 22 December 2009, where the river basin management plans concerned were not yet adopted by the competent national authorities. The ECJ held that even before 22 December 2009, the date on which the period imposed on the Member States for the publication of river basin management plans expired, the Member States had to refrain from taking any measures liable seriously to compromise the attainment of the result prescribed by Article 4 of that directive.⁸⁶ Especially since the prohibition of deterioration is formulated so that the Member States shall implement *all the necessary measures* to prevent deterioration the statement from the court must apply also in this case; and therefore it does not really matter from which year the prohibition applied. The ‘prohibition of deterioration’ is not formulated as a prohibition; *instead activity is needed*. The member states *shall* implement *all the necessary measures*. In

84 There is a lot of support to the position that Article 4 contains requirements that are to be met (the *result* must be achieved) in 2015; see e.g. CIS, report no 11, *Planning process*, p. 9; COM(2012) 670 final, *Report from the Commission to the European parliament and the council on the Implementation of the Water Framework Directive (2000/60/EC) River Basin Management Plans*, p. 3; C-32/05 *Commission v. Grand Duchy of Luxemburg* paras 63 and 75 plus the opinion of Advocate General Eleanor Sharpston, delivered on 18 May 2006, para. 75; C-43/10 *Nomarchiaki Aftodioikisi Aitoloakarnanias et al.*, paras 46 and 52 plus the opinion of Advocate General Kokott delivered on 13 October 2011, para 59; M. Ekelund Entson och L. Gipperth; *Mot samma mål?: Implementeringen av EU:s ramdirektiv för vatten i Skandinavien*, (Juridiska institutionen vid Handelshögskolan vid Göteborgs universitet: 2010) p. 104 and C. Backes och M van Rijswijk; *Effective environmental protection: Towards a better understanding of environmental quality standards in environmental legislation* in L. Gipperth och C. Zetterberg (eds); *Miljörättsliga perspektiv och tankevändor* Vänbok till Jan Darpö och Gabriel Michanek (Iustus förlag: 2013), p. 25. However; see also Krämer, Ludwig; *EU Environmental Law*, seventh edition, (Sweet & Maxwell:2011), p. 256.

85 Krämer, Ludwig; *EU Environmental Law*, seventh edition, (Sweet & Maxwell:2011), p. 256.

86 C-43/10 *Nomarchiaki Aftodioikisi Aitoloakarnanias et al.*, para. 60.

this case the time limits are interesting; since the implementation of article 4 is through the programmes of measures specified in the river basin management plans, there is no obligation to have measures to prevent deterioration before the measure programmes need to be adopted. The *prohibition* is an outflow from the principle of loyalty, as the court held; Member States have to refrain from taking any measures liable seriously to compromise the attainment of the result prescribed by Article 4 of the directive.⁸⁷

To conclude: Certain results (in brief; good water status by 2015 and no deterioration) must be achieved at a given time (2015, 2021 or 2027) for a given environment (the EU water bodies) and the requirements are set out by Union laws. We are thus dealing with EQS under the purpose of the IED. This conclusion is strengthened by some of the articles in the WFD, namely article 10 and, as a transitional provision, article 22.4.

Article 10 requires the adoption of the ‘combined approach’ for control of polluting discharges. The combined approach combines focus on the polluter meaning e.g. maximum limits on discharge of polluting substances and the use of best available technology⁸⁸ with focus on the environment; where the system of control focuses on the receiving water body⁸⁹. In the case of diffuse impacts (discharges into surface water) Member States shall ensure the establishment or implementation of the controls including, as appropriate, best environmental practices set out in a number of other directives, including the IED (formerly the IPPC), the Urban Waste-water directive, the Nitrates directive and the set of daughter directives under the Directive 76/464/EEC related to the discharge of dangerous substances into the aquatic environment. When the combined approach is used, the most stringent value must apply in every case.⁹⁰ Thus, a close link between control of activities and the achievement of a certain environmental quality is created.⁹¹ There is also a direct link between the IED and article 10 WFD since the priority substances of the WFD⁹² mirrors the group of substances for which emission limits are to be

87 See also C-83/97 *Commission v. Federal Republic of Germany*,

88 An ‘actor related approach’. See S. Westerlund; *GML En generisk miljölag. ver0.13* (2009), [on line]: “www.imir.com/gml/ver013.pdf”, (last visit 2012-04-15) p. 29.

89 A ‘reactor related approach’; See S. Westerlund; *GML En generisk miljölag. ver0.13* (2009), [on line]: “www.imir.com/gml/ver013.pdf”, (last visit 2012-04-15) p. 29.

90 For an explanation of the combined approach, see e.g. P. Chave; *The EU Water Framework Directive an introduction* (IWA Publishing: 2002), pp. 99; L. Gipperth; “Ramdirektivet för vatten- ett framsteg för skyddet av unionens vattenresurser” in Basse, E.M. et al. (eds); *Fågelperspektiv på rättsordningen: Vänbok till Staffan Westerlund* (Iustus förlag: 2002), pp. 470 and Westerlund, S.; *Miljörättsliga grundfrågor* (Tapir:1987) p. 56.

91 For an in depth study of the need to combine the perspectives (to operationalize the environmental goals); see e.g. L. Gipperth, *Miljökvalitetsnormer, en rättsvetenskaplig studie i regelteknik för operationalisering av miljömål* (Uppsala Universitet:1999), pp. 45; S. Westerlund; *Miljörättsliga grundfrågor 2.0* (Åmyra förlag: 2003) pp. 34 and pp. 98; S. Westerlund; *GML En generisk miljölag. ver0.13* (2009), [on line]: “www.imir.com/gml/ver013.pdf” (last visit 2012-04-15) p. 29.

92 WFD Article 16 and Annex VIII.

set under the IED. However, the WFD does not limit control to the larger types of installations covered by the IED, chapter II. Already this implicates that the WFD extends the principles of IED to all installations, even those that are too small to be included in the procedure for permits prescribed in the IED,⁹³ and probably the principles cover all environmental requirements in the WFD which might be affected by discharges to surface water. This interpretation is supported by the transitional provision, article 22.4 which includes installations covered by the IED; according to the transitional provision, permits for those installations must include additional measures (to BAT) if needed to comply with environmental quality standards (for the purposes of the IED). In article 22.4 it is specified that the environmental objectives in Article 4 and environmental quality standards established in Annex IX and pursuant to Article 16(7), and by Member States under Annex V for substances not on the list of priority substances and under Article 16(8) in respect of priority substances for which Community standards have not been set, shall be regarded as environmental quality standards for the purposes of p. 7 of Article 2 and Article 10 of Directive 96/61/EC (which are transposed to Article 2 and 18 in the IED). The mechanisms for implementing the combined approach must be implemented by 2012⁹⁴ and until then the transitional provision was relevant.

To summarize; the Member States shall, by 2015:

- A. enhance and restore all bodies of surface water with the aim to achieve *good surface water status* (defined as when both its *ecological status* and its *chemical status* are at least ‘good’⁹⁵).
- B. protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving *good ecological potential* and good surface water chemical status.
- C. protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge of groundwater with the aim to achieve *good groundwater* (defined as when both its quantitative status and its chemical status are at least ‘good’⁹⁶).
- D. achieve compliance with any standards and objectives under which the individual protected areas have been established.

If exemptions are applied the relevant year is 2021 or 2027. However, from the entry into force of the directive the Member States have to refrain from taking any measures liable seriously to compromise the attainment of the result

93 P. Chave; *The EU Water Framework Directive an introduction* (IWA Publishing: 2002), p. 102.

94 WFD, Article 10.2.

95 WFD, Article 2.18.

96 WFD, Article 2.20.

prescribed – also if applying the exemptions. From at least 2012 Member States shall implement all the necessary measures to:

- E. prevent deterioration of the status of all bodies of surface water, with the aim of progressively reducing pollution from priority substances and ceasing or phasing out emissions, discharges and losses of priority hazardous substances,
- F. prevent or limit the input of pollutants into groundwater
- G. prevent the deterioration of the status of all bodies of groundwater,
- H. reverse any significant and sustained upward trend in the concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution of groundwater.

Also in this case, from the entry into force of the directive the Member States have to refrain from taking any measures liable seriously to compromise the attainment of the result prescribed. For A-D the obligations are not as strict as for E-H (*all necessary measures*), though *all* results must be reached in order to comply with EU-law (unless exceptions are used).⁹⁷ The first requirement is however to transpose the obligations to national legislation; important is the *unquestionable binding force*, the *specificity, precision and clarity* necessary to satisfy the requirements of legal certainty, (including *appropriate publicity* and a *sufficiently precise and clear* legal outcome).

Sweden has implemented the WFD mainly through provisions in the Environmental Code chapter 5, in a Governmental Ordinance on the Management of the Water Environmental Quality⁹⁸ and through administrative provisions from the Swedish Environmental Protection Agency (*Naturvårdsverket*), The Swedish Agency for Marine and Water Management (*Havs- och vattenmyndigheten*), The Geological Survey of Sweden (*Sveriges Geologiska Undersökning*) and the from the competent authorities of the five river basin districts. According the Environmental code, the Government may authorize an authority to pass administrative provisions with EQS-S if the EQS follows from the Swedish membership in the EU.⁹⁹ In the governmental ordinance on the management of the water environment quality the Government has authorized the five authorities of the river basin district to determine the quality requirements for all bodies of surface water, ground water and protected areas in the river basin district.¹⁰⁰ These determined quality requirements become EQS-S and thus the requirements of the directive are transposed to Swedish national law.

97 See footnote 84.

98 Förordning (2004:660) om förvaltning av kvaliteten på vattenmiljön (vattenförvaltningsförrordningen, (F (2004:660)).

99 Swedish Environmental Code chapter 5 section 1 paragraph 2.

100 F (2004:660) 4 kap. 1 § and Förordning (2007:825) med länsstyrelseinstruktion, 24 §.

The question is, however; are they? I would like to question the *unquestionable binding force*.¹⁰¹ In *TA Luft* the ECJ made very clear that when the obligation imposed on the Member States is to prescribe ‘limit values’ in order to protect human health in particular, the persons concerned must be in a position to rely on mandatory rules in order to be able to assert their rights.¹⁰² In the WFD the character of the obligations is that of a ‘limit value’; a certain quality (‘good’) shall be reached at a certain date (2015 or, if exceptions are used; 2021 or 2027). Some of the parameters characterising the quality of the water body are set on EU level (mainly parameters concerning the chemical status) and some of the parameters are set on Member State level according to the requirements in the WFD (mainly parameters concerning the ecological status). Especially in the light of *TA Luft*, I think it is very doubtful that Sweden has chosen to implement these requirements through administrative provisions. I do believe that, in order to comply with a sustainable and adaptive management, the River basin districts are best equipped to prescribe the requirements since they have characterized the water bodies, however; in order to fulfil the requirement of *unquestionable binding force*, their suggestions should have been affirmed at governmental level through an ordinance. As implicated above, I also think such procedure would have been more compatible with Swedish legislation.¹⁰³

The next question I would like to address is the *specificity, precision and clarity* necessary to satisfy the requirements of legal certainty and I will deal with this question in two parts. First I will discuss the precision and clarity needed in *the norms* themselves, then the sufficiently precise and clear *legal outcome*.

There are specific EQS-S:s for each river basin district but they are more or less identical. When decided by the river basin district, the decision must consider the analysis of characteristics¹⁰⁴ so that if a water body is

101 Starting with this question means that I leave the very interesting question on whether it was appropriate of the Swedish government, according to Swedish national law, to authorize the authorities to pass administrative provisions on EQS-S; I believe this could be discussed, and there are certainly arguments for both positions, but since I think it’s inappropriate according to EU law to let the authorities adopt these kind of administrative provisions I leave this question outside the scope of this Article. See e.g. S. Mahmoudi and D. Langlet; legal opinion in case M 1881-09 in the Land and Environment Court of Appeal (*Mark- och miljööverdomstolen*), annex 1 to file appendix 30) and J. Kruse; *Rapport angående rättsverkan och tillämpning av miljö kvalitetsnormer för vatten – genomförande av ett uppdrag från Naturvårdsverket*, Dnr 537-12758-09, 2010-03-17, p. 19)

102 C-361/88 (*TA Luft*), para. 16.

103 See footnote 101.

104 F (2004:660) chapter 3, section 1. Swedish Environmental Protection Agency’s provisions NFS 2006:1, NFS 2008:1 (the authorisation in chapter 4, section 8 in F (2004:660) has been changed; NFS 2008:1 is still valid but is now directed to the Swedish Agency for Marine and Water Management, *Havs- och Vattenmyndigheten*, including changes in NFS 2010:12), plus the provisions of the Geological Survey of Sweden, *Sveriges geologiska undersökning* (SGU); SGU-FS 2008:265 (F (2004:660) chapter 4, section 8 and 8 a).

characterized as ‘good’, ‘moderate’, ‘poor’ or ‘bad’, the EQS-S must be determined as ‘good’ (since this is the result that must be reached). If the status is ‘high’, the EQS-S must be ‘high’ in order to comply with the prohibition of deterioration.¹⁰⁵ Correspondingly, if the ecological potential has been classified as ‘maximum’, then the EQS-S must be ‘maximum’ while ‘good’, ‘moderate’ or ‘poor’ ecological potential will result in the EQS-S ‘good ecological potential’.¹⁰⁶ The EQS-S concerning the chemical status in surface water shall be set as ‘good’¹⁰⁷ and EQS-S concerning ground water should be set so that the status is not deteriorated and so that ‘good’ status will be reached.¹⁰⁸

According to *the governmental bill* from 2003/04, EQS-S based on the WFD are ‘other norms’ arising from the Swedish membership in the EU i.e. they are EQS-S according to the Environmental Code, chapter 5, section 2 the first paragraph, point four.¹⁰⁹ Whatever that means (and this will be discussed, below). The following describes the types of EQS-S found in the basin management plans:

High ecological status in 2015: For surface water bodies classified as being of ‘high ecological status’ the EQS-S has been set at ‘high ecological status to be achieved by December 22, 2015’. The norm has the *character* of a limit value, but is an ‘other norm’ following point four.

Good ecological status 2015: For surface water bodies classified as being of ‘good ecological status’ EQS-S has been set as ‘good ecological status’ to be achieved by December 22, 2015. The norm has the *character* of a limit value, but is an ‘other norm’ following point four.

Good ecological status in 2021 or 2027: For those water bodies that have been classified in a poorer status than ‘good ecological status’, the EQS-S, in most cases, is set at as ‘good ecological status December 22, 2021’ or, in some cases, ‘December 22, 2027’. The norm has the *character* of a limit value, but is an ‘other norm’ following point four.

Good ecological potential in 2015: For surface water bodies which have been declared as heavily modified or artificial water, the EQS-S is most often set as ‘good ecological potential to be achieved by 22 December 2015’. The norm has the *character* of a limit value, but is an ‘other norm’ following point four.

Good ecological potential 2021 or 2027: For some surface water bodies which have been declared as heavily modified and artificial water, the EQS-S is set as good ecological potential with a deadline December 22, 2021 or 2027. The norm has the *character* of a limit value, but is an ‘other norm’ following point four.

Good surface water chemical status in 2015 (with the exception of mercury): For those water bodies that are classified to be of good surface water

105 F (2004:660) chapter 4, section 2; NFS 2008:1 chapter 3, section 2.

106 NFS 2008:1, chapter 3, section 3.

107 NFS 2008:1, chapter 3, section 4.

108 F (2004:660), chapter 4, section 5.

109 Governmental bill 2003/04:2, *Förvaltning av kvaliteten på vattenmiljön*, p. 42.

chemical status, the EQS-S is ‘good surface water chemical status to be achieved on Dec. 22, 2015’. A general exception is made for mercury and mercury compounds. The norm has the *character* of a limit value. According to the governmental Ordinance on the Management of the Water Environmental Quality¹¹⁰ this is a limit value following the chapter 5, section 2, first paragraph, point one in the Environmental code.

Good surface water chemical status in 2021 for one or more substances (except mercury): Water bodies which has not achieved ‘good surface water chemical status’ because of contamination by one or more priority substances (other than mercury), has received the EQS-S ‘good surface water chemical status by 2015’ with the exception for the substance that causes the lowered status; their deadline is instead 2021. The norm has the *character* of a limit value. According to the governmental Ordinance on the Management of the Water Environmental Quality¹¹¹ this is a limit value following the chapter 5, section 2, first paragraph, point one in the Environmental code.

There is a general exemption for mercury and mercury compounds.

Good chemical groundwater status 2015: Groundwater bodies classified as ‘good chemical status’ has got the EQS-S ‘good chemical groundwater status by 22 December 2015’. The norm has the *character* of a limit value. According to the governmental Ordinance on the Management of the Water Environmental Quality¹¹² this is a limit value following the chapter 5, section 2, first paragraph, point one in the Environmental code.

Good chemical groundwater status 2021 with exceptions for one or more substances. For groundwater bodies where the present status is poor, exception has been granted for the relevant substances until 2021. According to the governmental Ordinance on the Management of the Water Environmental Quality¹¹³ this is a limit value following the chapter 5, section 2, first paragraph, point one in the Environmental code.

Groundwater – good quantitative status 2015: This is the EQS-S for all ground water bodies. The norm has the *character* of a limit value. According to the governmental Ordinance on the Management of the Water Environmental Quality¹¹⁴ this is a limit value following the chapter 5, section 2, first paragraph, point one in the Environmental code.

Thus; all and each EQS-S has a time limit within which it must be complied with. As explained above, the prohibition of deterioration has been integrated in the EQS-S.¹¹⁵ The integration is based on the competent authorities’

110 F (2004:660) chapter 4, section 8 b.

111 F (2004:660) chapter 4, section 8 b.

112 F (2004:660) chapter 4, section 8 b.

113 F (2004:660) chapter 4, section 8 b.

114 F (2004:660) chapter 4, section 8 b.

115 It is possible to argue that this is not according to the requirements of the directive since Member States are obligated to take all necessary measures to prevent deterioration if the status since only deteriorations from a higher classification to a lower is prohibited. Because of the ‘on-out, all-out’-principle, this would mean that if all parameters are

assumption that EQS-S:s are prospective meaning that through them, the present environmental quality is maintained or enhanced.¹¹⁶

The question is now; are these norms precise and clear? If I, as a citizen, want to know what environmental status I can expect in my local lake and therefore turn to the administrative provisions, I will only be able to see if it is a 'high' or 'good' status that is expected. Only from reading the norms I will get no information on the meaning of "good" or "high". If I am an actor, which might want to set up an installation on the shore there will be no indication if there is a risk of not reaching a good status or concerning what parameters the risk is related to (to avoid deterioration in the water body). In order to find out, I need to turn to the river basin management plan or to the VISS (Water Information System Sweden) database. Compared to the Government Ordinance on Air Quality, where the requirements are possible to read directly in the Ordinance, it is not easy (at all) to understand the requirements concerning the water quality. However; this is something that could easily be resolved; concerning the concentration of chemicals they could be mentioned in the provisions instead of referring to the relevant directives (concerning chemical status) and concerning the environmental quality relevant types of loads or stresses could be mentioned with reference to, for example, VISS.

Then there is the question of sufficiently precise and clear *legal outcome*, which will bring the focus on 'point four' in chapter 5, section 2, first paragraph, of the Environmental Code.

5 Point Four

The EQS-S:s for water are thus, mainly, such "other norms" that follow from Sweden's membership in the EU (according to the Environmental Code Chapter 5 section 2 first paragraph, point four). The reason is that they were seen neither as 'limit values' nor as 'target values'.¹¹⁷ This statement must also be considered in the light of what was expressed in the bill concerning point four, as such [my translation]:

'high' and only one is 'good' the character will be good and thus the EQS-S will be 'good' meaning that all the parameters that are 'high' could be allowed to be deteriorated to 'good' and still comply with the EQS-S. See e.g. L. Gipperth och M. Ekelund-Entsson; *Mot samma mål? Implementeringen av EU:s Ramdirektiv för vatten i Skandinavien*. Juridiska institutionens skriftserie 007, (Handelshögskolan vid Göteborgs universitet: 2010) p. 32; L. Krämer; *EU Environmental Law*, seventh edition, (Sweet & Maxwell:2011), p. 256 and Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance document no 20; *Guidance Document on Exemptions to the Environmental Objectives*, p. 25 (in the guidance document it is argued that the prohibition is only between the classifications).

116 J. Kruse; *Rapport angående rättsverkan och tillämpning av miljökvalitetsnormer för vatten – genomförande av ett uppdrag från Naturvårdsverket*, Dnr 537-12758-09, 2010-03-17, p. 21, see also Swedish Government Official Reports (SOU) 2005:59, p. 71.

117 Governmental bill 2003/04:2; *Förvaltning av kvaliteten på vattenmiljön*, p. 42.

The first paragraph 4 gives the government the ability to customize EQS for other requirements that might follow of EU membership. An example of this is the environmental objectives for water district imposed by the Water Framework Directive...¹¹⁸

As seen above; the EQS-S:s for water, all have *the character* of limit values. The question is; does the character have any legal implication when being a 'point four-EQS-S'? In a statement¹¹⁹, the Swedish EPA concluded that the 'point four -EQS-S' are special in the sense that the legal status does not follow from the description in the section. A 'point four- EQS-S' might be a 'limit value' as well as a 'target value'. Whether it is a 'limit value' or not must be interpreted from the administrative provisions issuing the 'point four-EQS-S' and the governmental ordinances behind it¹²⁰ plus the relevant EU-directive from which it follows.¹²¹ As mentioned above; it is questionable whether the administrative provisions are 'clear and precise'; this vagueness is further emphasised when interpretation in at least three levels is needed in order to decide their character.

Interpreting the administrative provisions, above, gives that the 'point four-EQS-S' do have *the character* of a 'limit value'¹²² without being recognized as such by the Swedish legal system (the legal implication of a limit value, giving the possibility of further measures than BAT, is only possible under point one) but the EQS-S must still be regarded as *binding* when applied by authorities (environmental code chapter 5 section 3).¹²³ Not being able to ask for more measures than BAT, the authorities are left with the remains of the Environmental code, chapter 2 (the so-called 'General rules of consideration')

118 Governmental bill 2003/04:2; *Förvaltning av kvaliteten på vattenmiljön*, p. 32.

119 In the Ladvattenå-case in the Swedish Land and Environment Court of Appeal (M 1881-09) one of the litigants referred to a legal opinion written by S. Mahmoudi and D. Langlet which *inter alia* brought up the question whether or not the Government had the competence to authorize the competent authority to decide on the EQS-S. (Annex 1 to file appendix 30 in case M 1881-09)).

120 Opinion (2010-07-02) from the Swedish Environmental Protection Agency (*Naturvårdsverket*) in case M 1881-09 the Swedish Land and Environment Court of Appeal, Dnr 526-6044-09.

121 See M. Ekelund Entson och L. Gipperth; *Mot samma mål?: Implementeringen av EU:s ramdirektiv för vatten i Skandinavien*, (Juridiska institutionen vid Handelshögskolan vid Göteborgs universitet: 2010) p. 34.

122 In the legislative history the Government has stated that the EQS-S, in their capacity as provisions, are binding within their area of application and in relation to them they are directed to (Governmental bill 2009/10:184 *Åtgärdsprogram och tillämpningen av miljökvalitetsnormer*, p. 40.).

123 Opinion (2010-07-02) from the Swedish Environmental Protection Agency (*Naturvårdsverket*) in case M 1881-09 the Swedish Land and Environment Court of Appeal, Dnr 526-6044-09. *Naturvårdsverket* points out that it is problematic to have EQS-S of a certain character but not recognise this character legally.

together with the rules on planning and programs of measures.¹²⁴ This is probably *not* in accordance with the principle of the IED and thus *not* in accordance with the principle of WFD Article 10 (nor with the transitional provision in Article 22.4.). Thus, ironically, the use of point four, which was created in order to be able to meet all different kinds of obligations originating from the EU, results in not fully implementing the requirements.

However; even though the Swedish authorities cannot use the provision to allow more measures than BAT (chapter two, section seven, the second paragraph of the environmental act), Sweden is still, as a Member State, obligated to *reach the result* prescribed in the WFD. The result is binding. In her opinion, Advocate General Sharpston emphasized that some of the definitions in Article 2 ('good ecological status', 'good ecological potential', 'good surface water chemical status' and 'good groundwater chemical status') lay down precise standards of water quality that Member States must attain by the deadlines established, in particular, in Article 4 (as a general rule, 15 years after the entry into force of the directive). According to Advocate General Sharpston, Article 2, in conjunction with Article 4, thus imposes precise obligations on Member States — arguably ones that may also grant rights to individuals — to be achieved within a particular time frame.¹²⁵ The ECJ did not articulate anything concerning the rights to individuals (as Sharpston pointed out; the question did not need to be decided in the case) but clarified

...that provision [article 7.(2)] imposes obligations on Member States as to the results to be achieved, formulated in a clear and unequivocal manner to ensure, in particular, that their bodies of water meet the specific objectives laid down under Article 4 of the directive.¹²⁶

The Member States must ensure that their bodies of water meet the specific objectives laid down under Article 4. This is why the authorities, when applying the general rules of consideration, must go for a directive-conform interpretation of the environmental code. But then again; the requirements on actors would not be very clear and precise; in order to interpret this specific administrative provision it is necessary to interpret the underlying EU directive and in practice it will be difficult for the individual actor to discern what is expected. This brings us back to whether the administrative provisions fulfil the EU requirements on the transposition to national law; 'legally binding', 'clear and precise' and in the end we also face the national legislative question; is administrative provisions the appropriate way of implementing requirements in need of at least some interpretation?

124 Opinion (2010-07-02) from the Swedish Environmental Protection Agency (*Naturvårdsverket*) in case M 1881-09 the Swedish Land and Environment Court of Appeal, Dnr 526-6044-09.

125 C-32/05 *Commission v. Grand Duchy of Luxemburg*, Opinion of Advocate General Sharpston delivered on 18 May 2006, para. 75.

126 C-32/05 *Commission v. Grand Duchy of Luxemburg*, para. 75.

6 Concluding Remarks

When comparing the implementation of the AQD and the WFD two things are striking;

- (1) that when the Swedish government could have used the national possibility of authorisation it did not use it and
- (2) that the directives' labelling of a requirement doesn't matter; in the light of which the use of 'point four' makes the whole construction with EQS-S rather pointless.

The list below shows a simplified conclusion of the situation:

1.	2.	3.	4.	5.	6.
Requirements in the directive concerning the status of...	Label in the directive	EU-common requirements possible to read directly from the directive	The principle of article 18 in the IED applies	Implemented in Swedish legislation as an EQS according to one of the points (1-4) in chapter 5, section 2 in the environmental code	Implemented through... (kind of legislation)
Nitrogen-dioxid (NO ₂)	Limit value	Yes	Yes	1 (Lkf ¹²⁷ 8 §)	Ordinance (Lkf 10 §)
Nitrogen-oxides (NO _x)	Critical level	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 11§)
Sulphur-dioxide (SO ₂)	Limit value	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 12 §)
Sulphur-dioxide(SO ₂)	Critical level	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 13 §)
Lead (Pb)	Limit value	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 25 §)
Particles PM10	Limit value	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 18 §)
Particles PM2,5	Exposure concentration obligation	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 20 § para1, p.1.)
Particles PM2,5	Target value	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 19 §)
Particles PM2,5	National exposure reduction target	Yes	No (maybe yes if AEI ₂₀₁₀ is ≥22	2 (Lkf 9 §)	Ordinance (Lkf 20 § para1, p.2.)

127 Luftkvalitetsförordning (2010:477).

Benzene (C ₆ H ₆)	Limit value	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 17 §)
Carbon monoxide (CO)	Limit value	Yes	Yes	1 (Lkf 8 §)	Ordinance (Lkf 14 §)
Ozone (O ₃)	Long term objectives for the protection of human health	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 15 §)
Ozone (O ₃)	Long term objectives for the protection of vegetation	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 16 §)
Arsenic (As)	Target value	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 22 §)
Cadmium (Cd)	Target value	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 23 §)
Nickel (Ni)	Target value	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 24 §)
Benzo(a)pyrene (C ₂₀ H ₁₂)	Target value	Yes	No	2 (Lkf 9 §)	Ordinance (Lkf 21 §)
Good ecological status (surface water)	Objective	No	Yes	4 (governmental bill)	Administrative provision
Good chemical status (surface water)	Objective	Yes	Yes	1 (Vff ¹²⁸ 4 chapter 8 b §)	Administrative provision
Good ecological potential	Objective	No	Yes	4 (governmental bill)	Administrative provision
Good quantitative status (groundwater)	Objective	No	Yes	4 (governmental bill)	Administrative provision
Good chemical status (groundwater)	Objective	Yes	Yes	1 (Vff ¹²⁹ 4 chapter 8 b §)	Administrative provision
Prohibition of deterioration for surface water and ground water	Objective	Yes	Yes	Integrated in the provisions	Administrative provision

128 F (2004:660).

129 F (2004:660).

In order to comply with the IED any “yes” in column 4 must be followed by a “1” in column 5. This is necessary since only EQS-S according to point one in chapter 5, section 2 of the Environmental Code makes it possible for authorities to require more measures than best available technique. In the governmental bill it has, as mentioned above, been underlined that it must be a difference in consequences between a ‘limit value’ and a ‘target value’ because of the Members States’ responsibility concerning a ‘limit value’. However; in the case of air quality the government has analysed the requirements and, correctly, use ‘point one’ also when the labels in the directive were such as ‘critical level’, ‘exposure concentration obligation’ and ‘national exposure reduction target’. The EQS-S has been implemented through a governmental ordinance and they are precise and clear.

Concerning the WFD, there are some issues to discuss.

First of all, too much focus has been put on the EQS:s according to the directive; instead of being considered as the classification tools they are, they have been understood as the only ‘limit values’ of the WFD. Indirectly, they do become ‘limit values’ since they constitute the limit between the classification status ‘good’ and ‘failing to achieve good’ concerning the chemical status but so does also the other limits between ‘good’ and ‘moderate’ status concerning the ecological status. A certain quality (good) must be fulfilled at a given time in a given environment - and in the administrative provisions the EQS-S:s consequently have the *character* of ‘limit values’. It is a typical situation where the point one in chapter 5, section 2 of the environmental act should have been used but for some reason, point four was used instead; making the legal situation very unclear.

Secondly; in order to reach the directive’s result (including the need to be able to require further measures than best available technique), the national authorities must apply a directive-conform interpretation when dealing with the EQS-S:s in situations of inspections of issuing permits.

Thirdly; since a directive-confirm interpretation is needed in order to reveal the character of the EQS-S, it may be discussed whether or not the transposition into national law fulfils the requirements of being clear and precise; it may also be discussed whether an administrative provision is legally binding enough.

Finally; it might also be discussed from a national legislative perspective whether it was appropriate to authorize authorities to decide the EQS-S.

Ironically; it seems like point four was created in order to satisfy the need of being able to transpose all kinds of environmental quality requirements from the EU. But instead of using it only when difficulties to decide what kind of environmental requirement (a ‘limit value’, i.e. an EQS for the purpose of the IED, or something else) the Union puts on the Member States occur, it has been used also when the character is evident. This becomes a problem when the principle of the IED needs to be recognised; since it is impossible through point four. As a consequence; the transposition of the FWD into national Swedish legislation is doubtful. My conclusion is that some of the confusion, resulting in this halting transposition, emanates from the use of ‘EQS’ in the WFD seen in the light of what an ‘EQS-S’ is defined as in Sweden. So; what *is* an EQS, really? Might something that is not called ‘EQS’ in the directive

actually be an EQS-S – and also a ‘limit value’? For some reason the problem didn’t occur concerning the AQD, probably because ‘EQS’ is not mentioned in the directive. And concerning the use of EQS in the WFD and in Swedish national legislation, I quote the well-known words of Carroll:

*"I don't know what you mean by 'glory', " Alice said.
Humpty Dumpty smiled contemptuously.
"Of course you don't—till I tell you. I meant 'there's a
nice knock-down argument for you!' "
"But 'glory' doesn't mean 'a nice knock-down
argument'," Alice objected.
"When I use a word," Humpty Dumpty said, in rather a
scornful tone, "it means just what I choose it to mean—
neither more nor less."
"The question is," said Alice, "whether you can make
words mean so many different things."
"The question is," said Humpty Dumpty, "which is to be
master—that's all."¹³⁰*

130 L. Carroll; *Through the Looking-Glass* (1872).

