UNAPPROVED NO REDACTION NEEDED

THE COURT OF APPEAL
CIVIL

Court of Appeal Record Number.: 2023/75/CA

Neutral Citation Number [2024] IECA 162

Ní Raifeartaigh J.
Butler J.
Meenan J.

BETWEEN/

MICHELLE HAYES

APPELLANT

- AND -

THE ENVIRONMENTAL PROTECTION AGENCY AND THE MINISTER FOR ENVIRONMENT, CLIMATE AND COMMUNICATIONS, IRELAND AND THE ATTORNEY GENERAL

RESPONDENTS

-AND-

IRISH CEMENT LIMITED

NOTICE PARTY

Court of Appeal Record Number.: 2023/80/CA

BETWEEN/

SUE ANN FOLEY

APPELLANT

- AND -

THE ENVIRONMENTAL PROTECTION AGENCY, IRELAND AND THE ATTORNEY GENERAL

RESPONDENTS

-AND-

IRISH CEMENT LIMITED

NOTICE PARTY

JUDGMENT of Ms. Justice Butler delivered on the 24th day of June 2024

Introduction

1. This judgment deals with appeals taken by two individuals both of whom object to the granting of a revised Industrial Emissions Licence (IEL or "licence") by the respondent ("the EPA") to the notice party ("ICL") in respect of its cement plant at Castlemungret, County Limerick. The main revision to the existing licence allows for the reception and incineration of waste both as a fuel and a raw material to be used in the licenced activity. Both appellants, who reside in the vicinity of the plant, were active participants in a six-day oral hearing conducted on behalf of the EPA and have raised extensive grounds challenging the resulting decision. Their challenges, by way of judicial review, were heard over seven days in the High Court and their appeals from the decision of the High Court rejecting those challenges (Twomey J. [2022] IEHC 470) ran for three days before this court.

2. Although the issues raised on the appeal are somewhat narrower than those canvassed before the High Court, the appeal was nonetheless both procedurally and technically

complex. A number of issues arose as to whether some of the points the appellants sought to argue were within the scope of the cases as pleaded by them and in respect of which they were granted leave to apply for judicial review of the EPA's decision. Issues also arose as to the standard of review which ought to have been applied by the High Court to a decision made as the results of a process which, as a requirement of EU law, must include both an environmental impact assessment ("EIA") and an appropriate assessment ("AA") of the impacts of the proposed development in order to be valid. This is particularly pertinent to the High Court's review of how the decision maker treated scientific evidence adduced by the appellants challenging the findings of the experts engaged by the notice party and the assumptions upon which those findings were based. It will also be necessary to address how an appellate court should treat findings made by the High Court in this regard.

3. The technical issues, by which I mean technical in the scientific sense, include the manner in which the EPA assessed and treated the emissions likely to result from the process in respect of which it granted the revised licence. These arguments mainly centred on the assessment of air emissions and the treatment of substances such as nitrous oxides, sulphur dioxide and hexavalent chromium. In the context of AA it is contended that the assessment carried out by the EPA was inadequate because, *inter alia*, it failed to expressly consider the impacts of these emissions on bryophytes - i.e., a group of plants which include mosses and liverworts - and did not include a bryophyte survey.

4. There are also a number of purely legal issues such as whether amendments to the EIA Directive made in 2014 but which did not come into effect until after the notice party had made its application for review of its existing licence should have been applied to the assessment of that application and whether the notice party is a fit and proper person within the meaning of the relevant legislation to hold an industrial emissions licence.

5. This brief description is not intended as a comprehensive overview of all of the issues but rather to give some flavour of the interlocking legal and technical arguments made to this court on appeal.

6. For the purposes of this judgment, I propose initially to describe the project the subject of the revised licence which is, in turn, the subject of these proceedings. I will then outline the industrial emissions licencing process and in doing so provide a chronological account of the major steps taken in that process in respect of this review application. Following that I will set out the legal requirements to which the EPA is subject in carrying out EIA and AA, bearing in mind that the bulk of the grounds raised concern the manner in which the EPA purported to discharge those legal obligations as regards the specific issues in the case. I will then summarise the issues as raised by each of the appellants, identifying those which are still live on this appeal. It will then be necessary to consider the pleading points taken by the respondent and notice party as regards some, but by no means all, of the arguments which the appellant sought to pursue on the appeal. Related to this I will address the scope of the review to be carried out by the High Court of the EPA decision and in turn by this court on appeal from the High Court's decision.

7. When all of those preliminary matters have been addressed, I will then examine the issues themselves, looking initially at the purely legal grounds (the fit and proper person requirement and which EIA Directive applied to the EIA carried out by the EPA) and then at the technical grounds (including air monitoring and the treatment of bryophytes in the appropriate assessment). It should be apparent from my description of the issues raised by each appellant that within these broad headings there are a number of subheadings, all of which will be considered.

8. I do not propose to devote a section of this judgment to the High Court judgment nor to the grounds of appeal raised by each of the appellants. These will be addressed insofar as they are relevant under each of the preceding headings.

Description of the Project

9. In order to understand many of the arguments made in this case and the response to those arguments, it is necessary to appreciate that ICL has operated a cement plant at this location in County Limerick since 1938 - i.e., for nearly 90 years. Whilst broadly speaking the plant is described as a cement plant, the licenced site also includes a quarry from which raw material for the cement manufacturing process is extracted. The original cement manufacturing process which was in operation until the early 1980s is described as a "wet process" and involved the use of wet clay extracted from an area within the site which, as a result, filled with water and became a large pond which is now known as Bunlicky Pond (also referred to in the material before the EPA as the Bunlicky Clayfield Pond). All of the pond lies within the application site boundary although the cement plant itself occupies a smaller portion of the overall site and is at some remove from Bunlicky Pond. The pond has been bisected by the construction of the M18 roadway and that portion of it which lies to the northeast of the roadway has been included in a site designated under European law for ecological protection. Since the 1980s the cement manufacturing process has been a dry one and the pond has been used for the landfilling of inert waste. Various effluents resulting from the process carried out on-site are discharged into the pond.

10. The commencement of this activity predates the introduction of the precursor to the current industrial emissions licencing scheme by the Environmental Protection Agency Act 1992 ("the EPA Act 1992" or the "1992 Act"). As the operator of an *"existing activity"* ICL was obliged to apply for and obtain a licence (originally called an integrated pollution

prevention and control (IPPC) licence and later called an integrated pollution licence but now known as an industrial emissions licence). Provided the IPPC licence application was made by a certain date, ICL was entitled to continue its existing activity pending the outcome of the licencing process. A licence was duly applied for by ICL and granted by the EPA in May 1996.

11. Over the years the licence has been reviewed by the EPA on a number of occasions. For the most part, these reviews were initiated by the EPA for the purpose of bringing the existing licence into compliance with updated EU law standards and requirements. These reviews resulted in revised licences issued in 2009 to comply with the Integrated Pollution Prevention and Control Directive 1996/61/EC; in 2013 to comply with miscellaneous regulations dealing with surface and ground water and waste; a second review in 2013 to comply with the Industrial Emissions Directive 2010/75/EU (IED) and most recently in 2017 to comply with the Commission's Implementing Decision (CID) regarding BAT conclusions under the IED for the cement industry. This latter review post-dates ICL's application for a review which was made on 9th May, 2016 and led to the decision which is impugned in these proceedings, in other words the 2017 review initiated by the EPA was carried out while ICL's separate application for a review was pending. Apart from this application, the only review requested by ICL was for a technical amendment in 2006 to allow for the continued disposal on-site of construction material which included asbestos. Although the historic landfilling of asbestos-contaminated waste (which has since been removed and disposed of off-site) was the subject of some discussion at the oral hearing it did not feature in the litigation.

12. The introduction of the IPPC licencing scheme in 1992 replaced the pre-existing, fragmented position under which separate licencing regimes with different licencing authorities governed emissions to air and to water (with various distinctions applying

depending on whether the waters concerned were inland or tidal), noxious fumes, noise, odour and waste. The integrated licencing regime focuses on large scale industrial activities as a unit and allows for a more coherent approach to addressing all of the potential polluting emissions likely to be produced by that activity and the consequent effect of the activity on the environment.

13. An industrial emissions licence operates to licence an activity, or more specifically the emissions from an activity, which is carried on in an installation on the licenced site. Because the licence is site specific it encompasses all of the related activities which are being carried on by the licensee and the term "installation" is deemed to include any directly associated activity whether licensable under the 1992 Act or not. In the case of the Castlemungret site, prior to the impugned decision the categories of activity licenced were the production of cement and the disposal of waste (connected to the production of cement). Although the extraction of stone from a quarry is not itself listed as a licensable activity in the IED, because the quarry is associated with the cement plant it is also subject to the terms of the licence.

14. The revised licence alters the scope of the existing activity by permitting the recovery of waste both through its use as a fuel to replace a portion of the existing fuel used and as a raw material. In practical terms, the production of cement requires heating raw materials at a very high temperature to produce cement clinker and the use of waste as a fuel will involve the incineration (in this case more precisely the co-incineration) of waste on-site. Although the review application encompassed related changes including the introduction of new storage areas to accommodate the waste and an increased volumetric gas flow rate from certain emission points, from the most part the concerns raised by the public focused on the consequences for the local community and for the environment of the incineration of waste at this location.

15. The revisions applied for included an increase to the gas flow rates from three emission points - kiln 6 and cement mills 6 and 7. During the process a further change was proposed, namely the removal of a different emission point, coal mill 6 (also described as the pet coke mill) and the ducting and venting of its emissions through kiln 6, thus increasing the emissions through kiln 6 by about 10%, but not increasing emissions overall. In her arguments concerning air emissions, Ms. Foley contends that the location and height of the emission points are significant as regards the potential effect of the emissions and that as the air modelling exercise was conducted before this change was made, insufficient account has been taken of it.

16. ICL presented the application for revisions to the licence as providing a number of environmental benefits. The fuel currently used at the plant is an imported manufactured fossil fuel known as pet coke derived from petroleum residues in oil refining. Replacing a proportion of the pet coke currently used with lower carbon alternative fuels, will result in a consequent reduction in the amount of non-renewable fossil fuels required and in the greenhouse gas emissions from and the carbon footprint of the plant. ICL estimates that there will be some 40,000 tonnes per annum reduction in CO_2 emissions. There are currently five cement plants in Ireland (one of which is in Northern Ireland) and, apart from this one, all are licenced to use waste as an alternative fuel. The technology has been in use in Europe for over 40 years and therefore, according to ICL, it is a proven and safe technology.

17. It is perhaps significant to note that although there has been a cement plant at this location for a very long period, the city of Limerick has expanded significantly over the past decades. What was once a relatively sparsely populated rural location is now proximate to built-up residential areas and to facilities, such as schools, used by the local population. The level of concern about the incineration of waste on-site amongst members of the local community is evident from the fact that over 4,000 objections were initially received by the

EPA to the application to review the licence. The range of concerns expressed was extensive and included public health concerns arising from emissions to both air and water, concerns about the nature of the waste to be incinerated and concerns for the environment. These latter concerns were expressed both generally and because the plant is located adjacent to a number of ecologically significant sites protected under EU law and indeed a portion of one such site is included within the application boundary. Many members of the local community expressed apprehension about ICL's management of the site based on historic occurrences and breaches of the licence which had resulted in criminal proceedings.

18. As mentioned above, the quarry associated with the cement plant lies within the licenced site and is subject to the terms of the licence. The quarry itself, having been operational since 1938 most likely benefitted from existing use rights at the time the Local Government (Planning and Development) Act, 1963 was passed and came into force in 1964. Nonetheless it was the subject of an application for and the grant of planning permission in the early 1990s. There was some dispute as to whether an EIA had been conducted in connection with this planning permission, but the EPA has no jurisdiction to embark upon a consideration of this question. In any event the quarry was also registered under the terms of s. 261 of the Planning and Development Act, 2000.

19. Finally as regards planning matters, an industrial emissions licence authorises the carrying on of an activity within a site. Depending on the activity, planning permission may also be required, particularly if the provision of infrastructure is necessary in order to carry on the activity. In this case an application for planning permission was made by ICL which included the construction and provision of storage areas and related infrastructure (including a number of buildings) to facilitate the on-site handling, storage and introduction of the waste. Planning permission was granted by An Bord Pleanála on 11th April, 2018 subject to a number of conditions. Notably, condition 4 of the planning permission precludes the

incineration of hazardous waste. Therefore, only non-hazardous waste types may be accepted by ICL at the plant.

Licencing Process

20. The licencing process before the EPA is governed by Part IV of the EPA Act, 1992. That Act has been amended a number of times since its enactment, most notably by the Protection of the Environment Act, 2003. Section 82(2) establishes the requirement for a licence and provides that licensable activity cannot be carried out unless a licence is in force in respect of it. Section 83 confers upon the EPA the power to determine applications for licences made in compliance with licencing regulations made under s. 89. The current licencing regulations and those operative at the material time are the EPA (Industrial Emissions) (Licencing) Regulations 2013 (SI 137/2013) although these have since been amended (SI 190/2020). Under s. 83(1) the EPA may grant a licence subject to conditions or refuse the application. There are some differences between the procedure applicable to applications for licences for activities which come within the scope of the Industrial Emissions Directive, (which this one does) and those which do not. These are not relevant to any of the issues raised by the appellants and therefore I do not propose dealing with them.

21. The balance of s. 83 sets out in some detail the steps which must be taken by the EPA and the matters which must be considered by it in determining an application for a licence. For the most part these are expressed as applying to both the grant of a licence and of a revised licence. They include at s. 83(2A) the carrying out of an EIA. The version of s. 83(2A) which was in place when ICL applied for its review was, subject to some amendment, that introduced in 2012 by the EU (Environmental Impact Assessment) (IPPC) Regulations 2012 (SI 282/2012). Those provisions have now been modified to reflect the amendments made to the 2011 EIA Directive (2011/92/EU) by the 2014 EIA Directive (2014/52/EU).

Whilst the underlying obligation to conduct an assessment remains the same, the modifications are procedurally significant such that an assessment carried out under the 2011 EIA Directive would not satisfy the requirements of the 2014 Directive. The question of which directive was applicable is an issue raised by both appellants in this appeal.

22. Less controversially, in considering an application for a licence the EPA is required under s. 83(3) to have regard to various matters including the particulars submitted with the application, further information submitted in response to any request made by the EPA and any submissions or observations made by third parties. Under s. 84 in granting a licence the EPA is obliged to specify in the licence emission limit values (ELVs) for any environmental pollutant likely to be emitted by the activity in significant quantities. As will be seen, this licence is structured to control the emission of pollutants by specifying ELVs in relation to specified substances at specified emission points. The setting of ELVs involves a consideration of recommended standards both as to the ELVs themselves and as to whether emissions at that level will breach other standards (such as air quality standards) set for the purposes of ensuring the protection of the environment. Much of the argument on the appeal dealt with whether the EPA had satisfied itself to the requisite standard that emissions made in accordance with those ELVs would not have any adverse effects on protected sites and whether the calculation and modelling exercises carried out by ICL were sufficiently robust and correct to enable the EPA to be so satisfied.

23. Section 83(5) precludes the grant of a licence unless the EPA is satisfied of certain matters which are set out in the subsection. These range from the general requirement that emissions from the activity will not cause significant environmental pollution (s. 83(5)(a)(v)) to more specific requirements that air quality standards (AQS) and water quality standards set under other legislation will not be contravened (s. 83(5)(a)(i) - (iv)).

24. Under s. 83(5)(a)(vi) the EPA is required to be satisfied that the best available techniques (BAT) will be used to prevent or reduce emissions from the activity. The concept of BAT was introduced at an EU level in 1984 and was originally qualified by the rider *"not entailing excessive cost"* (BATNEEC). The removal of this rider in the IPPC Directive in 1996 shifted the technical focus to pollution prevention and reduction *simpliciter* and no longer envisages a balancing of the need to achieve this against the cost to the operator of doing so. As technologies and techniques are subject to constant upgrading and improvement, BAT is generally assessed by reference to formal standards set by regulators in reference documents. At an EU level on 26th March, 2013 the Commission adopted an Implementing Decision (2013/163/EU) establishing BAT under the Industrial Emissions Directive on industrial emissions for the production of cement, lime and magnesium oxide. The analysis carried out by ICL in its EIS and NIS are directed towards establishing that the operation of its revised activity would meet the BAT standard set in the Commission's implementing decision (CID). I might observe that this BAT document is some 45 pages long and is an extremely technical document which, apart from its recitals, is largely incomprehensible to me as a lawyer, albeit a lawyer with some experience in this type of case. This is a matter to which I will return when considering the standard of review that should be applied by courts to a decision of a body such as the EPA.

25. Finally as regards s. 83(5)(a), it should be noted that under subparagraph (xi) the EPA is required to be satisfied that the *"applicant or licensee or transferee is a fit and proper person to hold a licence"*. One of the issues on this appeal is whether, the objectors having challenged ICL's fitness to hold a licence, the EPA gave sufficient or indeed any reasons for its conclusion that it was. The distinction drawn between applicants, licensees and transferees indicates that the fit and proper person requirement is one which applies not just

to the initial grant of a licence but also when an application is made by an existing licence holder for the revision of a licence.

26. The fit and proper person requirement is dealt with substantively in s. 84(4). That subsection lists three criteria, which, if satisfied, require the EPA to regard an applicant as a fit and proper person to hold a licence. ICL places some emphasis on the fact that the subsection does not, in its terms, require a person who does not meet the criteria to be treated as unfit to hold a licence. The criteria are first, that the person should not have been convicted of an offence under the 1992 Act or other related legislation which has been prescribed for the purposes of this section; second, that in the opinion of the EPA the applicant has the appropriate technical knowledge or qualifications to carry out the activity and, third, that in the opinion of the EPA the person is in a position to meet certain financial obligations arising from the carrying on of the activity or its cessation. Both the second and third criteria afford the EPA a measure of discretion in that it is the EPA's opinion that the person is capable of meeting the requirements which is determinative. Whilst the *"no conviction"* requirement is ostensibly phrased in a mandatory manner (a person shall be regarded as a fit and proper person if they do not have a relevant conviction), s. 84(5) confers on the EPA a discretion, if it considers it proper to do so in any particular case to regard a person as a fit and proper person notwithstanding the fact that they have been convicted of a proscribed offence. As ICL has a number of convictions for breach of the terms of its licence, it is clear that in granting the revised licence the EPA exercised its discretion under s. 84(5). The issue in the appeal is whether it has given any or any adequate reasons for doing so.

27. Section 86 is a key provision regarding the grant of licences as it sets out the types of condition which the EPA must (under s. 86(1)(a)) and may (under s. 86(1)(b)) attach to a licence or a revised licence. I do not propose to go into these in detail save to note that the conditions which the EPA must attach to a licence are largely focused on the prevention and

control of pollution. These include at s. 86(1)(a)(i) the imposition of emission limit values (ELVs) for environmental pollutants likely to be emitted from the activity in sufficient quantities and at s. 86(1)(a)(iv) specifying the appropriate requirements for monitoring such emissions which, in the case of activities falling under the IED, under s. 86(1)(a)(iva) must be based on the relevant BAT conclusions. The conditions attached to a licence are critical in defining the scope of the licenced activity and the manner in which it may be carried on.

28. Section 86A is specifically directed at the imposition of conditions on IED activities and requires, *inter alia*, that the EPA not grant a licence unless satisfied that BAT will be used to prevent, eliminate or minimise emissions and the impact of the activity on the environment. Under s. 86A(5) and without prejudice to the generality of s. 86(1), the EPA is required to apply BAT conclusions as a reference for the imposition of conditions to a licence and under s. 86A(4)(a) ELVs set by the EPA must ensure that emissions do not exceed any BAT conclusion under the IED. What all of this means in a case such as this where the licenced activity (the production of cement) is the subject of a CID setting BAT conclusions for the sector, is that in attaching conditions to the licence the EPA must ensure that BAT is to be used by the licensee and must set ELVs by reference to the BAT conclusions to ensure that the levels set in the BAT conclusions are not breached. There is limited scope for the EPA to set less strict conditions and it may do so only for a trial period and for the purpose of testing emerging technology (which did not arise in this case). Although the section does not expressly deal with it, it is presumably open to the EPA to impose stricter ELVs than those required in the BAT decision. Consequently, it is the general practice for IE licence applications to be made by reference to BAT standards where they have been formally set and also for licences to be granted by reference to those standards on the assumption that compliance with those standards will ensure the necessary level of environmental protection.

29. Section 87 deals with the processing of applications for licences and reviews of licences. Although it is expressly stated in most of the proceedings sections that they apply to both licences and revised licences, it is clear from s. 87 that the procedure to be applied to the determination of each is, with some small variations, largely identical and the term *"application for a licence"* is defined as including an application for a revised licence. Sections 87(1B) to (1I) deal with interactions between the EPA and the relevant planning authority where the development requires both an IE licence and planning permission and an EIA is required to be carried out or, where the EPA decides an EIA is necessary but no planning permission exists or has been applied for. The detail of these provisions is not presently relevant save to note that the legislative scheme envisages that applications for planning permission will be made first and the EIS (now known as an environmental impact assessment report) provided to the planning authority will be passed from the planning authority to the EPA. The practice of the EPA is to stall consideration of the licence application whilst the planning process is underway. In this case this is evident from the fact that while the licence application was lodged in May 2016 and a number of interactions took place between the EPA and ICL in the months which followed, there was then a hiatus from the autumn of 2016 until August 2018. Planning permission was granted for the infrastructure necessary to facilitate the revisions to the licence by An Bord Pleanála in April of that year.

30. The decision-making process thereafter described in s. 87 is an unusual one in that it provides for two distinct phases, both of which result in the making of a decision which is capable of constituting the grant (or refusal) of a licence. In addition to the provisions which I am about to describe, the detail of the process is subject to the provisions of the licencing regulations. In practice the EPA appoints an inspector to consider the material submitted to it and to report to the EPA on the application. The inspector's report will, and in this case

did, include a recommended determination in the form of a draft licence. Under s. 87(2), before making its final decision on an application under s. 83, the EPA must notify a range of people including the applicant for the licence and anyone who made submissions on the application of *"the manner in which [it] proposes to determine the application"*. Where the EPA proposes to grant the licence it must provide a copy of the proposed licence. The draft licence is known as a proposed determination or PD. The decision to grant or refuse a licence is taken formally by the board of the EPA and, in doing so it may add to or modify any condition recommended to it by its inspector and it must provide reasons for its decision.

31. Under s. 87(5) any person may object to the proposed licence within a specified period and may request an oral hearing of their objection. If no objection is made to the proposed determination within the relevant period then, under s. 87(4), the EPA must issue a licence in terms of the proposed determination. The significance of this is that where an EIA and AA are required to be carried out by the EPA in respect of any licence application, those assessments must form part of the decision-making process leading to the making of a proposed determination as the decision making process will conclude at that point in the absence of any objection to it.

32. However, if objection is made, the process continues, which will include the continuance of the assessment processes. In her statement of grounds Ms. Hayes took issue with the fact that the EPA had already made a proposed determination before it came to make its final decision, contending that it was biased or somehow lacked impartiality as a result. This issue was not pursued on appeal. In any event it is an issue which could only be raised against the State, as, in the absence of a successful challenge to the legislation, the EPA was obliged to comply with the statutory scheme as it currently exists.

33. The EPA has an absolute discretion to hold an oral hearing, which discretion it exercised in this case. Section 88 contains further provisions relating to the conduct of an

oral hearing. Under s. 88(3) the person appointed to conduct the oral hearing must make a report to the EPA which includes a recommendation regarding the grant or refusal of the licence or revised licence and the conditions to be attached to such licence. This report must be considered by the EPA before it makes its decision on the application.

34. The oral hearing which was held over six days in December 2020 was unusual in that, because of the public health restrictions in place to deal with the COVID-19 pandemic, it was held online rather than in person. A second report was provided to the EPA by the chairperson of the oral hearing which recommended the grant of a licence in the terms originally proposed but subject to the modification of some of its conditions. If no oral hearing is held, a technical committee is appointed to examine the objections made to the proposed determinations and to report to the EPA. At this stage the process tends to focus on the specific issues raised in the objections to the proposed determination and issues in respect of which there is no controversy will not necessarily be revisited.

35. Again, the formal decision to grant or refuse a licence is made by the board of the EPA. The obligation on the EPA to provide reasons for the decision, including its conclusions on any EIA or AA it may have conducted is contained in s. 87(9A). The text of this provision was amended in 2020 by the EU(EIA) (EPA Act 1992) (Amendment) Regulations (SI 191 of 2020) to reflect the additional requirements of the 2014 EIA Directive, the applicability of which is in issue in these proceedings. Although some issues on appeal concern the reasoning obligations on the EPA (the identification of the EIA and AA conducted by the EPA and the duty to provide reasons in respect of the fit and proper person requirement) the arguments made were more general in nature and did not depend on the precise text of s. 87(9A) nor, by extension, on which version of that text applied.

36. A decision of the EPA to grant a licence may only be challenged by way of an application for judicial review brought within eight weeks of the date of the decision under

s. 87(10). No issue arises in this case as to the appellants' compliance with these requirements nor with their *locus standi* to bring these proceedings. However, the eight week time limit is potentially relevant to the fact that the respondent and notice party have objected to certain of the arguments made by the appellants on the basis that they were not properly pleaded.

37. The review of licences is dealt with under s. 90. Apart from mandatory periodic reviews or reviews required because of the publication of a Commission decision containing BAT conclusions, the EPA may review a licence at any time *"with the consent or on the application of the licensee"* (s. 90(i)(b)). Under s. 90(2) on the completion of a review the EPA has three options. It may refuse to grant a revised licence (s. 90(2)(a)(i)); it may amend the existing licence by altering its conditions (s. 90(2)(a)(ii)) or it may grant a new licence (also called a revised licence) in lieu of the existing licence (s. 90(2)(b)). The general practice of the EPA is to grant a revised licence in lieu of the existing licence thus re-licensing the entire activity and not just the changes sought by the licensee. Ms. Hayes places some emphasis on these provisions in arguing that because the EPA granted a revised licence in this case rather than merely amending the existing licence, the requisite environmental assessments should have been conducted from a baseline of a greenfield site without the existing activity rather than from the baseline of an established, licenced activity. I will return to this issue in due course.

38. In conducting a review, the EPA must, under s. 90(6) have regard to any changes in the environmental quality in the area in which the activity is located and any changes in emerging BAT techniques, especially those listed in a relevant BAT reference document. The review of a licence is also to take account of the results from the monitoring of existing emissions. As the same procedural provisions apply to the review of an existing licence as to an application for a new licence, the main difference in the process is that the review will

focus on changes – whether, as here, changes requested by an applicant to the activity or changes in the background circumstances - since the existing licence was granted and will have the benefit of being informed by existing knowledge of the operation of the activity including its emissions.

39. Finally, under s. 97 the EPA has a power to revoke or suspend a licence on the grounds that the licensee no longer satisfies the requirements of being a fit and proper person under s. 84(4) and the circumstances in which the licensee no longer satisfies these requirements are sufficiently serious to warrant revocation of the licence. Interestingly, there is no general power to revoke licenses unconnected with the fit and proper person requirement. If the EPA has environmental concerns about the continued operation of the activity it must invoke the review procedure or exercise other statutory enforcement powers. The EPA and ICL rely on the non-invocation of this provision regarding Ms. Foley's arguments under the fit and proper person heading.

Chronology

40. In light of this overview of the EPA's licencing procedure it may be useful to set out the chronology of events giving rise to the issues in these proceedings. As already outlined, ICL have operated a cement plant at Castlemungret since 1938 and in 1996 ICL was granted a licence by the EPA for the existing activity on-site. The licence was reviewed, at the behest of the EPA in 2009, 2013 (twice) and 2017. On 9th May, 2016 ICL applied for a review of its then existing licence to incorporate three changes to its licenced activity. These were the use of up to 90,000 tonnes per annum of non-hazardous waste as an alternative fuel and/or raw material; the provision of new storage areas for the waste material and an increase in volumetric gas flow rates from certain emission points. A number of requests for further information were made by the EPA and replied to by ICL in 2016, 2018, and 2019. I will

return to the later of these requests which are significant both in terms of the material provided in reply and in the context of the appellants' arguments regarding the potential applicability of the 2014 Directive.

41. The making of the application was publicly notified as was the subsequent receipt of an NIS in 2018 and the EPA received 4,180 valid submissions in respect of it. Most of these submissions objected to the proposed revisions to the licence and indeed often objected to the activity itself and reflect a substantial degree of public concern regarding the proposal.

42. ICL submitted an Environmental Impact Statement (EIS) with its application which had previously been submitted to Limerick City and County Council in connection with the related planning application. The EIS is a lengthy and technical document. Of relevance to the issues on the appeal is the fact that it included a chapter on air quality and climate (Chapter 8) prepared on behalf of ICL by a consultant namely Arup. This included the results of an air dispersion modelling exercise showing predicted ground level concentrations of various substances both under the then-existing and the proposed scenarios. Six requests for further information were made by the EPA, many of which dealt with matters covered by the EIS. The manner in which these requests were framed and the extent to which it follows from them that the EIS submitted in May 2016 was so deficient that the application was or should have been deemed invalid lies at the heart of the assertion that the application is covered by the 2014 rather than by the 2011 EIA Directive. I will return to this issue in due course.

43. ICL also submitted a screening report in respect of appropriate assessment which suggested that a full AA would not be required. The conclusions of the screening report were accepted by the planning decision makers (Limerick City and County Council and an Bord Pleanála) and no AA was conducted in connection with the planning process. However, the EPA conducted a screening assessment with the assistance of an external

consultant and determined that an AA was required. In a request for information issued to ICL on 1st November 2018 the EPA requested the submission of a Natura Impact Statement (NIS) under the EC (Birds and Natural Habitats) Regulations 2011 (SI 447/2011). The terms of that request and the specification of a number of matters of which account should be taken in the NIS has given rise to grounds of appeal raised by Ms. Hayes contending that inadequate consideration was given to these mattes in the appropriate assessment process.

44. An NIS was submitted by ICL to the EPA on 12th December, 2018 along with a large volume of other material. It might be noted that a report entitled *"Assessment of atmospheric emissions"* prepared by Arup was also submitted on this date as an appendix to the NIS. There is a considerable overlap between this report and the chapter on air quality and climate in the EIS, although some elements of the latter (construction stage impacts and effects on climate) are not included. The report also addressed a number of specific queries in the EPA's request for further information on 1st November, 2018 including a request to specifically factor in the increased gas flow rates which were part of the requested revision. The 2018 report also took account of the effects of a further proposed alteration to the application, namely the removal of coal mill 6 as an emission point and the ducting of its emissions through kiln 6.

45. The modelling of atmospheric emissions and the alleged deficiencies in this report played a major part in this appeal. Some of the criticisms stemmed from a later request for information from the EPA (dated 29th May, 2019) which asked, *inter alia*, that the impacts be recalculated using a different assumed deposition velocity for nitrogen which is relevant for calculating the ground level concentration of nitrates. Ms. Foley complains that although this was done and revised calculations were submitted, as the modelling exercise was not reworked using the revised figures, the results can no longer be relied on. She complains that the NIS, submitted on the same date as the atmospheric emissions report, was based on

the earlier calculations in chapter 8 of the EIS which did not take account of the proposed alterations due to the omission of coal mill 6. She also complains that the NIS did not take account of further revised calculations submitted in July 2019. Statements by those who prepared the NIS that the changes made no difference to the outcome of their assessment did not, according to Ms. Hayes, provide the requisite degree of certainty required in appropriate assessment that there will be no adverse impact to any European site.

46. Returning to the chronology, on 4th September, 2019 the inspector who had been tasked with considering the application delivered a report to the EPA which included a recommendation to grant the revised licence subject to certain conditions. That report, as well as comprising a general analysis of the application and the submissions made by third parties, included an EIA and an AA. On 10th September, 2019 the Board of the EPA met to consider the licence application and decided to issue the licence. Consequently, on 18th September, 2019 a proposed determination including the proposed licence was published by the EPA. Eighteen valid objections were received (including one from ICL) within the relevant time period. Six of the objectors requested an oral hearing into their objections and on 14th January, 2020 the EPA determined that an oral hearing should be held. Both appellants made objections to the PD and appeared at the oral hearing. Ms. Foley was represented by counsel who also appeared on behalf of a local group. Ms. Hayes was not represented but is herself a practicing solicitor and president of an environmental group.

47. The oral hearing was due to be held in May 2020 but had to be cancelled due to the covid pandemic. Instead, it was held online over six days between 2nd and 9th December, 2020. The chairperson of the oral hearing explains the procedure adopted in his report. It is important to bear in mind that a hearing of this sort is conducted with considerably less formality than a court hearing. The oral hearing commenced with evidence from ICL and the various experts who had prepared the EIS and NIS on its behalf. Each of these witnesses

had a prepared statement of evidence which they read into the record. All statements of evidence were posted online on a website dedicated to the oral hearing and thus, were available to those participating. Witnesses who gave evidence were subject to cross-examination, not just after they had given evidence, but could be recalled by third parties after they had given their own evidence so that conflicts and other concerns could be teased out. It is apparent from the report of the oral hearing that the chairperson requested ICL to provide clarification and responses to specific issues and queries raised by third parties as the oral hearing progressed. The ICL witnesses gave evidence on the first day of the hearing, Ms. Hayes on the second day and Ms. Foley and her expert witness, Dr. Shanahan, gave evidence on the fourth day. On the final day the oral hearing heard closing statements from, *inter alia,* ICL, Ms. Hayes and counsel representing Ms. Foley.

48. The chairperson of the oral hearing submitted a report to the EPA on 6th April, 2021. That report recommended a grant of the revised licence subject to a significant number of modifications to the conditions of the proposed determination including changes reflecting and consequent upon the proposal to remove of the emission point at coal mill 6 and the ducting of those emissions through kiln 6. The Board of the EPA met on the 29th April, 2021 at which meeting the report was presented to them by the Chairperson of the oral hearing and decided to grant a revised licence subject to further amendments to the Chairperson's proposed conditions. One of these required all landfilling at the on-site landfill to cease from the date of the grant of the revised licence. The revised licence was formally issued on 18th May, 2021.

Issues on the Appeal

49. It may be useful at this stage to outline briefly the issues on the two appeals, some of which have been touched on in the preceding sections of this judgment. With one exception,

the issues raised by the two appellants are quite discrete. The one common area is that both contend that a valid application, including a complete and valid EIS, was not received by the EPA until September 2019. This post-dates the operative date for the coming into effect of the amendments made by the 2014 EIA Directive, namely 16th May, 2017. Thus, both appellants contend that the EPA should have carried out its EIA under the terms of the 2014 EIA Directive rather than the 2011 EIA Directive. As the differences between the two directives are material, the EIA carried out by the EPA under the 2011 Directive would not satisfy the requirements of the 2014 Directive and, consequently, any decision to grant a licence based on this EIA would be invalid if the 2014 Directive should have been applied. Thereafter, although most grounds raised by both appellants focus on elements of the EIA or AA processes, they do not overlap.

50. Ms. Foley contends that it is not possible to ascertain where the EPA's AA is to be found nor what the contents of that AA are. More specifically, she has raised a number of interlinked grounds relating to the assessment of air emissions and contends that, in light of the evidence given by Dr. Shanahan, the EPA could not have been and did not demonstrate that it was satisfied that those scientific doubts had been adequately addressed. The headings under which she makes these arguments are that there was no revised modelling carried out when the EPA requested the substitution of a different nitrous oxide deposition velocity rate; that account was not taken of increased mass emission rates and the resulting increase in SO_2; that there was no assessment of the impact of simultaneous emissions from two emission points (coal mill 6 and kiln 6) during the period when both are permitted to operate before the works required for the ducting of the coal mill emissions through kiln 6 have been carried out, and finally that the air modelling assessment does not properly assess the worst case scenario.

51. Ms. Foley also contends that the EPA has not provided reasons for its conclusion that ICL is a fit and proper person to hold this licence.

52. In addition to the 2011/2014 EIA Directive point, Ms. Hayes also raises points regarding the air modelling assessment that covers different issues to Ms. Foley. She complains that a baseline survey assuming the absence of any activity should have been carried out on the application for review of the licence as the effect of the ultimate decision was to re-licence the entire activity. She contends the assessment of hexavalent chromium or chromium VI emissions is defective for a number of reasons, including the acceptance by the EPA of evidence given by ICL's expert, Ms. Whyte at the oral hearing as to the background levels of chromium VI which are lower than the levels recommended by US guidelines for assumed background levels.

53. Regarding appropriate assessment, Ms. Hayes complains the assessment was inadequate as it did not consider the effect of proposed emissions on bryophytes and that no bryophyte survey was carried out. Implicit in this submission is the contention that a bryophyte survey was required in order for valid conclusions to have been reached in the AA.

54. Each appellant has raised grounds which were rejected by the High Court on the basis that they had not been adequately pleaded. Many of these grounds were not pursued on appeal including, *inter alia*, grounds relating to waste, bottle nosed dolphins, dioxins and furans and total organic compounds. However, each appellant seeks to advance on the appeal one issue which the trial judge ruled as being outside the scope of the pleaded case. In the case of Ms. Foley the issue in question concerns the non-designation of Bunlicky Pond under the Water Framework Directive 2000/60/EC. In the case of Ms. Hayes it concerns whether whooper swans were adequately dealt with in the NIS and by extension in the AA. I will deal with both of these issues under the heading "Pleadings Points" below.

55. The appellants were obviously unsuccessful on all of these grounds before the High Court and, it goes without saying, that the respondent and notice party are opposing all grounds of appeal and standing over the High Court judgment. They also make a number of complaints about the original pleading which remain relevant both as regards the pleading issues identified in the preceding paragraph but also the scope of the argument the appellants should be permitted to make regarding some of the issues which are undoubtedly pleaded although perhaps not in the extensive manner subsequently argued. The respondent and notice party also raise issues regarding the extent to which the court should consider affidavit evidence from experts seeking to impugn the EPA's conclusions and the evidence led by ICL on which those conclusions are based, but who were not engaged to give evidence in the course of the process before the EPA. Again, I will return to this issue below.

56. Finally, as regards the scope of this appeal, both appellants originally joined parties representing the State to their proceedings and sought declarations to the effect that the requirements of the 2014 EIA Directive had not been properly implemented in Irish law. In particular it was contended that the State had failed to expressly transpose the transitional provisions of Article 3 of the 2014 EIA Directive in the EU(EIA)(EPA Act, 1992)(Amendment) Regulations 2020 (SI 191/2020). The trial judge felt it was unnecessary to deal with this issue in any detail in light of his earlier finding that the provisions of the 2011 EIA Directive had been properly applied to the application. Consequently, he held that the alleged failure to transpose the transitional provisions had no bearing on the outcome of the case.

57. No grounds of appeal were specifically addressed to that portion of the High Court judgment but both appellants continued to maintain that the 2011 EIA Directive was incorrectly applied by the EPA to its assessment application instead of the 2014 EIA Directive. In light of this ambiguity, a respondent's notice and written submissions were

filed on behalf of the State in both appeals and counsel was instructed to attend the hearing. During the course of the appeal hearing, counsel on behalf of both appellants confirmed that no appeal had been taken on the non-transposition grounds even though both continued to maintain that the 2014 Directive should have been applied. On this basis it was agreed that the State did not require to be represented at or attend the balance of the appeal hearing. However, counsel for Ms. Hayes subsequently sought to qualify his client's position by suggesting that if the appellants won on the EIA Directive point *"it would more or less automatically follow that the regulations did not adequately transpose the Directive"*. For the record, the court did not agree with this stance. If either appellant wished to maintain that it followed automatically from a finding in their favour that the EPA had applied the wrong EIA Directive that the 2014 Directive had not been properly transposed, then that issue ought to have been put squarely within the parameters of the appeal. Grounds of appeal would have to be raised against the trial judge's conclusions on the relief sought against the State and the State afforded the opportunity to meet those grounds directly. It cannot be the case that the State would have to accept or be bound by an inference that an EU measure had not been properly transposed as a result of a different finding made against a different party to the litigation.

Pleading Points- General

58. It is clear from his judgment that the trial judge was very exercised about the number of issues which the appellants sought to pursue which, in his view, had not been properly pleaded by them and, conversely, by the number of issues pleaded - and to which the respondents and notice party had to respond - which were not then pursued. He expresses a valid concern about the amount of time, judicial resources and legal costs unnecessarily expended for both of these reasons particularly where, because of the particular costs rules

which apply to environmental cases, the public purse must bear the brunt of the costs involved. He was also concerned about the fairness to the respondent and notice party of having to meet at trial a case of which they had no advance notice.

59. In fairness to the appellants, they are exercising a right of access to justice conferred on them, in an environmental context, by European law. There is a legal obligation on the State to provide the public with access to a review procedure before a court or equivalent body established by law in order to challenge the substantive or procedural legality of a decision in the environmental sphere which has involved public participation. The review process must provide access to a remedy which is fair, adequate and effective and, crucially, *"not prohibitively expensive"* (See Art. 9 of the Aarhus Convention 1998 on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters; Art. 3 of the Public Participation Directive 2003/35/EU now reflected in Art. 11 of the EIA Directive 2011/92/EU as amended).

60. Ireland has given effect to the *"not prohibitively expensive"* requirement by immunising an unsuccessful applicant in such cases from the normal commercial risk of an adverse costs order (subject to limited exceptions) whilst retaining the possibility that a successful applicant will recover costs against a state agency whose decision is successfully challenged. Under s. 87(10) of the EPA Act, 1992 any challenge to a decision of the EPA to grant a licence under s. 83 must be made by way of an application for judicial review in the High Court. Therefore, the appellants had no choice as to the procedure to be followed nor as to the level of jurisdiction at which their proceedings had to be issued.

61. Any High Court proceedings are likely to entail significant costs and it is and remains a concern if additional costs are unnecessarily incurred because the case an applicant seeks to run does not conform with the case that they have pleaded. That concern is heightened in the case of proceedings by way of judicial review because the scope of the case is defined

not just by the pleadings themselves but also by the fact that in order to bring such proceedings an applicant has to be granted leave to do so on foot of a preliminary application brought for that purpose. Therefore, a respondent is put on notice not just of the grounds an applicant wishes to pursue but of the fact that the High Court has conducted a preliminary screening of those grounds and determined that they meet the requisite threshold for being permitted to proceed by way of judicial review. This additional screening stage does not feature in other forms of proceeding such as, for example plenary proceedings, and reflects a feature inherent to judicial review, adverted to by the trial judge, which is that the respondent to the proceedings is invariably a public authority.

62. Thus, the scope of judicial review is defined not just by the pleadings but by the fact that an applicant has been granted leave to pursue the case as pleaded, and perhaps not all of the case which they initially advanced. The grounds on which leave to apply for judicial review have been granted cannot be amended without a further application to court. It goes without saying that any application to amend must, at a minimum, meet the threshold which applied at the initial leave stage. However, an applicant who is seeking to amend a statement of grounds to challenge a decision of the EPA will face a further difficulty arising from the fact that a statutory time limit of 8 weeks applies to the making of an application for leave to apply for judicial review in respect of such decision. Those time limits cannot be evaded by making an application outside of the time limits to substantively amend a statement of grounds issued within time. Although there are limited circumstances in which such an amendment can be allowed (e.g., under Order 84, rule 21 and s. 87(10)(a) and (b) of the EPA Act, 1992) neither appellant brought a formal application to amend their statement of grounds. Instead, both contended that the new argument fell within the scope of the grounds as originally pleaded.

63. That brought into play a separate requirement of O. 84 of the Rules of the Superior Courts, namely that under O.84, rule 20(3) which precludes an applicant from pleading by way of general assertion and instead mandates *"that the applicant should state precisely each such ground, giving particulars where appropriate, and identify in respect of each ground the facts or matters relied on as supporting that ground"*. There is a similar obligation on respondents as regards the grounds stated in a notice of opposition under O. 84, r. 22(5). The respondent and notice party both complain that there was a failure to comply with O. 84, r. 20(3) in respect of various pleas made by both appellants in that the pleadings were not adequately particularised, the pleas lacked clarity; were vague, general and imprecise; that matters put forward as *"facts"* grounding the pleas made were *"replete with commentary, assertion, criticism and opinion"*; that factual assertions were made for which there was no evidence in the proceedings, particularly no expert evidence, and that matters were pleaded which had not been the subject of any submissions or observations made by any party during the course of the licensing process.

64. Unfortunately, many of these criticisms are justified. The pleadings in the *Hayes* case are particularly problematic. The statement of grounds divides the grounds into two sections, one factual and the other legal. To some extent this splitting of factual from legal grounds reflects the structure required by High Court Practice Direction 124, para. 13 and the Third Schedule although the pleadings in the *Foley* case, by identifying core grounds within which more specific pleas are made, are perhaps closer to what is intended by the Practice Direction. In any event under the heading *"facts"* the statement of grounds in the *Hayes* case includes 82 pleaded paragraphs (actually, 96 paragraphs when all subparagraphs are separately counted) over 29 pages. Whilst some of this is factual it is, as the notice party and respondent complain, replete with commentary, criticism and opinion. I note that the Practice Direction requires that any mixed question of fact and law, any commentary on the

facts or any interpretation of their implications should be in the legal grounds. The subsequent legal pleas do not expressly identify where in the lengthy recital of the *"facts"* those relied on to support any particular plea are to be found.

65. It may be that in very technical and complex cases such as this, separating the factual from the legal pleas, save insofar as the factual pleas go no further than setting out the chronological progression of the decision-making process, hinders rather than helps an applicant to achieve the requisite clarity. However, as the *Hayes* applicant did not in any event comply with the Practice Direction, this question remains at large.

66. In passing, I might observe that whilst I appreciate the trial judge's concern about the costs that litigation of this type entails, I do not share his view that judicial review proceedings inferentially allege that individual public servants have acted unlawfully. I do not agree that making the case that a statutory body has not complied with all of the legal requirements imposed on it is akin to alleging professional negligence against the individuals involved. The remedy of judicial review is predicated on the possibility that a decision-making process may have gone wrong. To say that a statutory decision maker - and by extension those within the decision maker responsible for making the decision - has acted unlawfully does not carry with it any suggestion of *mala fides* or impropriety. It merely means that an error has occurred which may in turn require the court to intervene to remedy the legal or procedural defect and to safeguard the rights of those affected by the process.

67. The need for adherence to the pleaded case in judicial review proceedings was re-stated by the Supreme Court in *AP v DPP* [2011] 1 IR 729. The issue arose because the High Court judgment addressed issues which went beyond those pleaded and it was unclear if by doing so the judge intended to permit an amendment to the statement of grounds, which amendment was not reflected in the court order. Murray CJ emphasised the need, where new arguments going beyond those pleaded emerge at trial, for an applicant to seek an order

permitting any extended or new ground to be argued. Denham J. felt that once an application for leave to apply for judicial review was granted, this defined the scope of the review and the jurisdiction of the High Court to deal with it. Hardiman J. regarded the case as *"an extreme example"* of the tendency that *"little attention has been paid to the absolute necessity for a precise defining of the issues on which relief is sought until the case is actually before the courts"*. Fennelly J. regarded the application for judicial review as *"very narrowly based"* and refused to allow argument on issues which were neither in the original grounding affidavit nor the statement of grounds.

68. The matter was revisited more recently by the Supreme Court (Baker J.) in *Casey v Minister for Housing* [2021] IESC 42. The circumstances in *Casey* were unusual in that the applicant sought to challenge the Minister's approval of a baseline study and monitoring programme which was required as a condition of a foreshore licence which had been granted some years earlier. The licence itself was not the subject of challenge, most likely because the applicant was well outside the time limit for doing so when the proceedings were instituted. The trial judge, of her own motion, raised an issue as to whether the licence was validly granted (because of a failure to comply with a notification requirement) and decided that it was not. As a result, she declined to determine the underlying judicial review which focused on whether a precondition to the commencement of the activity under the licence had been properly complied with.

69. Baker J. reviewed the law as to pleadings from the starting point that *"the pleading in a case set the parameters and fixed the issues in dispute between the parties and those to be determined by the court"*. Although she emphasised that *"an adversarial system of law does not restrict the adjudicative process as to render it improper for a judge to explore questions of law he or she considers do arise on the pleaded case"* she nonetheless had concerns over

the manner in which the trial judge had done so in the case at hand. She stated (at para. 42 of the judgment): -

> *"... None of the decided cases would suggest that a judge hearing an application for judicial review is entitled to make a determination on a point for which leave was not granted, which was not pleaded, where no application was made to amend pleadings and where consideration was not given before the point was argued as to whether the time limits in judicial review, or other gateway requirements might be a bar to relief".*

70. These concerns have resonance here. The need for parties to what might loosely be categorised as planning and environmental judicial reviews to comply strictly with the pleading requirements of O. 84, r. 20 and 22 have been emphasised by a number of High Court judges dealing with these cases. In *Alen-Buckley v An Bord Pleanála* [2017] IEHC 541 Haughton J. stated *"Linking new matters back to generally pleaded grounds is not permissible, nor is pointing to information which was before the Board. The court is concerned with the contents of the documents before the Board only in the context of arguments which have been correctly pleaded…".* Similarly, in *Rushe v An Bord Pleanála* [2020] IEHC 122 Barniville J. stated at para. 113: -

> *"In my view, these pleading obligations imposed upon an applicant in planning judicial review proceedings are particularly important where those cases involve issues of very considerable complexity and give rise to issues under EU Directives, such as the Habitats Directive and the EIA Directive. It is especially important in those type of cases, involving such complex issues, that the applicant's case is clearly and precisely pleaded in order that the parties opposing the application (whether they be respondents or the notice parties or both) are clearly aware prior to the hearing of the application for judicial review of what precisely the case is. Such*

precision is also required, as Murray CJ pointed out in AP, to ensure that there is no doubt, ambiguity or confusion as to what the applicant's case is before the High Court, in the context of any appeal from the judgment of that court to the Court of Appeal or the Supreme Court. It is not appropriate that a case brought on a particular basis, in which reliefs are sought on stated grounds is, when the case comes on for hearing, transformed into one in which different or additional grounds are sought to be advanced in support of the relief sought or additional reliefs are sought. Such a course would be unfair on the parties opposing the application for judicial review and on the court."

71. At the time this case was before the High Court, there was some ambiguity as to whether the strict requirements of O. 84, rs. 20 and 22 regarding pleadings operated so as to limit the public's access to justice in a manner contrary to Art. 9 of the Aarhus Convention and Art. 11 of the EIA Directive. The question had been the subject of a request for a preliminary ruling under Art. 267 TFEU from the High Court in a different case in 2021. Judgment was not delivered in that case, *Eco-Advocacy CLG v An Bord Pleanála* Case C-721/21, until 15th June, 2023 shortly before the hearing of this appeal. The question referred asked, essentially, whether those provisions of EU law should be interpreted as precluding a national procedural rule according to which an application for judicial review had to be pleaded precisely in accordance with O. 84, r. 20(3). In considering this issue the CJEU held firstly that there was no breach of the principle of equivalence since the procedural rules in question applied irrespective of whether the alleged infringement concerned Irish or EU law; and secondly that there was no breach of the principle of effectiveness because procedural rules of this nature ensured the proper conduct of proceedings by, in particular, protecting them from the delays inherent in the examination of new pleas. Consequently, it concluded (at para. 29 of its judgment): -

> *"In light of the foregoing considerations, the answer to the first question is that EU law must be interpreted as not precluding a national procedural rule according to which, first, an application for judicial review, both under national law and under the provisions of EU law such as Article 4(2) to (5) of and Annex III to Directive 2011/92 or Article 6(3) of Directive 92/43, must state precisely each ground, giving particulars where appropriate and identify in respect of each ground the facts or matters relied upon as supporting that ground and, second, an applicant may not rely on any grounds or any relief sought at the hearing other than those set out in that statement."*

Thus, it is now clear that EU law does not preclude the application of strict rules regarding the pleading of environmental cases before national courts, even where those cases allege a breach of European law.

72. Finally, in contending that the trial judge had taken an impermissibly narrow view of the pleadings, Ms. Foley argued, relying on the decision of Simons J. in *St. Audoen's National School v An Bord Pleanála* [2021] IEHC 453, that a distinction should be drawn between the pleaded grounds of challenge and the evidence underpinning those grounds, particularly where the respondent is able to engage with the argument in its statement of opposition. Reliance was also placed on the judgment of Humphreys J. in *Sweetman v An Bord Pleanála* [2021] IEHC 390 cautioning that the cry of *"particularise that"* can echo indefinitely and *"that the process has to stop when the point being made is acceptably clear"*. This is indeed correct but obviously has no application where the ground sought to be argued has not been particularised at all and is far from clear to those parties attempting to respond to it.

73. Having set out the legal context I now propose to examine the two issues still live in the appeal which the trial judge held had not been properly pleaded.

Pleading Point – Foley Case - Bunlicky Pond

74. The argument Ms. Foley sought to make at the hearing and on the appeal was quite specific and was obviously modelled on allegedly similar factual circumstances which had led Hyland J. initially to quash a decision of An Bord Pleanála to grant planning permission - see *Sweetman v An Bord Pleanála (Bradán Beo)* [2021] IEHC 16. Subsequently, on the application of the EPA (which was not originally a party to the proceedings) Hyland J. reopened the case and made a reference to the CJEU. The case concerned a grant of planning permission for the extraction of water from a lake in order to wash salmon in fish farms off the coast for disease prevention purposes. The lake in question had not been designated or assigned a status under the Water Framework Directive (WFD) by the EPA. The applicant argued, initially successfully, that An Bord Pleanála could not comply with its obligation to ensure non-deterioration and the achievement of good surface water quality in the lake in the absence of such designation as deterioration was required to be measured having regard to a benchmark set by a status analysis following designation of the water body. By analogy Ms Foley wished to argue that the failure by the EPA to designate Bunlicky Pond and to assign it a status under the WFD meant that any deterioration of it due to the licenced activity could not be properly assessed and that, as a result, no licence could be granted.

75. After delivery of judgment in *Bradán Beo* but before the order was drawn up, the EPA intervened to advise the court *inter alia* that the lake in question fell below the threshold at which mandatory identification and assignment of a status was required under guidance issued by the EU Commission on the implementation of the Water Framework Directive. It also pointed out that the water body did not meet the discretionary criteria for inclusion. On the request of the applicant, in a subsequent judgment in the same case [2021] IEHC 777 Hyland J. referred a case to the CJEU under Art. 267 of the TFEU. The questions referred

asked whether the Water Framework Directive required Member States to classify all water bodies, even those below the threshold in the Commission guidance and whether development consent could be granted for a development affecting an unclassified water body and, if so, what obligations lay on the decision-making body in this regard.

76. The CJEU had not ruled on these questions at the time the case was heard in the High Court. Nonetheless the very fact that these questions were referred suggested that there was a potentially significant issue regarding the legality of granting development consent potentially affecting an undesignated water body. As it happens judgment was delivered by the CJEU shortly before the hearing of the appeal. The effect of the judgment might be described as a nil-all draw. The CJEU held that there was in fact no obligation under the WFD to designate a water body of the size of the lake in question but, more broadly, that in making a decision regarding the grant of development consent which potentially affected an undesignated water body, the decision maker had to be satisfied that the development would not, by reason of its effect on the lake, cause deterioration of any other designated water body, and that the project was compatible with the programme established under the WFD for the river basin district concerned. Therefore it would seem that non-designation does not deprive a decision maker of jurisdiction to make a decision, but the process must nonetheless take account of factors which would be relevant under the WFD. Of course The outcome of *Bradán Beo* is not material to this case unless the point has been properly raised and pleaded, as undoubtedly it was in *Bradán Beo* itself.

77. The appellant relied on two paragraphs in her statement of grounds to argue that the ground had been properly pleaded, both of which are contained within core legal ground 2 which deals with alleged breaches of the Habitats Directive. Grounds 39 and 40 contain the following pleas: -

"39. The first named respondent made a fundamental mistake in law and in fact in its consideration of the Bunlicky pond as described at paragraph 2.7 of the Inspector's Report and failed to integrate or incorporate the analysis contained therein into the appropriate assessment requirements contained in the Habitats Directive. Furthermore the respondent made a fundamental error of law and fact in considering that Bunlicky Pond was not a designated water body for the purposes of the Water Framework Directive and the analysis, findings and approach adopted within paragraph 2.7 of the Inspector's Report is inconsistent and incompatible with the obligations under the Habitats Directive.

40. The first named respondent failed to comply with or have any appropriate regard to the Water Framework Directive in the consideration and determination of the application."

78. Counsel for Ms. Foley conceded that the ground was *"not pleaded perfectly"* albeit this concession only went so far as being *"on a literal view"* and that *"the substance of the point"* the appellant was trying to make was, he contended, in fact pleaded. He argued that read together the two paragraphs disclosed the true nature of the complaint, namely that the EPA had not fulfilled its obligations under the Water Framework Directive to designate Bunlicky Pond. He contended that there was no dispute as to the fact that Bunlicky Pond was not designated and that the plea that the EPA erred in considering that it was not designated would be absurd unless it were read as meaning that the mistake lay in a failure to designate it rather than a misunderstanding of what its actual status was.

79. With respect, I do not agree. The first sentence in para. 39 seems to contend that the description of Bunlicky Pond at para. 2.7 of the inspector's report (the reference in fact seems to be to the report of the chairperson of the oral hearing) was incorrect and that the chairperson's analysis of Bunlicky Pond was not incorporated into the appropriate

assessment. The extent to which the AA incorporated the inspector's and chairperson's reports is pleaded elsewhere in the statement of grounds and will be dealt with separately. The argument that the appellant wishes to read in to the second sentence in para. 39, namely that Bunlicky Pond should have been but was not designated and that no decision should have been made affecting it until it was designated, is quite specific. In my view it is not encapsulated in a plea that it was a fundamental error to consider that Bunlicky Pond was not a designated water body. Nor is that plea evident from the factual pleas made as regards the status of Bunlicky Pond which focus on the status of part of the pond as being comprised within the River Shannon and River Fergus Estuary SPA and the landfilling of the pond. Nowhere is the straightforward plea made that Bunlicky Pond should have been designated under the Water Framework Directive. Equally, nowhere is it pleaded that the non-designation of Bunlicky Pond affected the manner in which the application for review of the licence should have been assessed, much less are particulars are provided of how and why that is alleged to be so.

80. I do not think that this difficulty can be overcome by reading para. 39 in conjunction with para. 40. Paragraph 40 does expressly invoke the Water Framework Directive but the plea made in relation to it, i.e., that the EPA failed to comply with or have regard to it in the consideration and determination of the application, is too vague and general to support the argument now being made. The plea at para. 40 undoubtedly falls foul of O. 84, r. 20(3). It is an assertion in general terms which is both unparticularised and in respect of which the facts supporting it have not been identified.

81. The fact that a respondent has not understood that a plea encompasses the argument made and consequently fails to engage with it will not necessarily be determinative of the scope of the plea. The contrary position, where a respondent has engaged with the argument, is however likely to indicate that the point has been sufficiently clearly pleaded (see *St.*

Audeon's National School v An Bord Pleanála (above)). Notably, in this case neither the respondent nor the notice party understood the plea as having the meaning on which the appellant now relies. The EPA acknowledged that Bunlicky Pond is partially contained within the relevant SPA and made pleas regarding the conduct of the appropriate assessment consequent on that. However, its specific response to para. 39 and 40 was to plead that Bunlicky Pond was not a designated water body for the purposes of the Water Framework Directive but that it was (and presumably was considered as) part of the SPA. As regards para. 40 the EPA invoked O. 84, r. 20(3) to criticise the general nature of the plea. Without prejudice to that, it pleaded that discharges to water and the proposed limits to emissions to water met the requirements of the relevant domestic regulations.

82. ICL provided a single response to paras. 39 and 40 jointly, pointing out that no basis had been pleaded for the assertion that Bunlicky Pond was designated under the Water Framework Directive (that designation presumably being inferred from the plea that the EPA had erred in considering it was not designated); that it was not in fact designated; and a denial of any breach on the part of the EPA of *"any applicable obligations"*, none having been specified under the Water Framework Directive.

83. I am satisfied that the trial judge was correct to hold that the arguments Ms. Foley seeks to make under this heading do not fall within those pleaded in her statement of grounds.

Pleading Point - *Hayes* Case - Whooper Swans

84. The argument Ms. Hayes seeks to adduce under this heading is that the appropriate assessment carried out by the EPA was defective because of its failure to deal adequately with whooper swans. Whooper swans are one of the bird species for whose protection the River Shannon and River Fergus Estuaries site has been designated as an SPA. It was contended that notwithstanding the identification of a potential link between the proposed

licenced activity and the SPA that there was no further consideration of the potential impact on the protected species, albeit that the NIS concluded that there would be no effect on water or air quality and no loss of habitat at the sites.

85. Because of the manner in which the *Hayes* case is pleaded, it is particularly difficult to track through the statement of grounds to identify the plea actually made. A lengthy narrative account of the AA process is set out between paras. 40 and 51 of the factual section of the statement of grounds - although as previously noted these pleas are not purely factual. This section notes, *inter alia*, the EPA's decision that an AA would be required in the contents of its letter to ICL of 1st November, 2018. That letter noted concerns arising from the *"potential presence of at least one SCI species, namely whooper swans, from the SPA from* (presumably this should read *'on'*) *the proposed development site"*. It then asserts that *"proper baseline surveys"* needed to be conducted which, the appellant contends, would take at least 12 months in order to present a complete picture both of wintering birds and breeding birds.

86. Paragraph 49 then complains that the NIS did not set out the baseline conditions of the site and, in particular, did not record the presence of species such as the whooper swan. In all, this paragraph goes on to list some 40 species and habitat types which it is alleged were not addressed and the presence of which was not excluded in the NIS submitted by ICL and the AA conducted by the EPA. It seems that in listing these 40 species and habitat types the appellant has basically set out all or virtually all of the species and habitat types for which the SPA and SAC at this location have been designated. The paragraph goes on to complain that the NIS looked at water discharges but not at the impact of air emissions. This is obviously incorrect given that the NIS included an air emissions report.

87. In the legal grounds at para. 5.1 under the heading "Habitats", the appellant pleads a breach of the Habitats Directive in that the EPA *"failed to assess all relevant habitats and*

species for which the lower River Shannon Estuary SAC and Shannon and Fergus Estuaries SPA are designated". There is no specific reference to the whooper swan. The plea at 5.2 is even more generic and does not even reference the site or sites to which it relates.

88. The difficulty with pleading of this nature is that in para. 40 of the factual pleas the appellant appears to have listed all or virtually all of the habitats and species for which the two sites are designated. Under para. 5 of the legal grounds the plea is a very generic one to the effect that the EPA has failed to assess all relevant habitats and species. The combination of the two is tantamount to a general plea of a failure to conduct a valid AA and an invitation to the court to revisit the AA process in its entirety.

89. Pleas of this nature are not appropriate unless the decision maker has failed to conduct an AA *simpliciter* in circumstances where an applicant says that one is required. In circumstances, as here, where an AA was conducted and all of the habitat types and species referred to were identified via the NPWS Site Conservation Objectives in the NIS on which the AA is based, the onus lies on an applicant to plead specifically what the alleged error in conducting the AA actually was. I understand the trial judge's concern that a plea of this nature could operate as a Trojan Horse which would allow an applicant to make any argument based on any qualifying interest at the hearing of the action. An applicant cannot rely on a generic plea to the effect that an AA is defective in all respects as regards all habitats and all species to make a detailed argument regarding a specific species of which no notice was given in the pleadings. On this basis I would be inclined to hold that the appellant has not pleaded a sufficiently particularised case regarding the whooper swan. This does not flow from the fact that, by virtue of this being an environmental case, the appellant is in a privileged position regarding costs compared to other judicial review applicants nor from the fact that the decision of a public body was made on its behalf by professional people. Rather it flows from the requirements of O. 84 r. 20(3) as interpreted by courts.

90. There is however one factor which tends against that conclusion. This is the fact that whooper swans are referred to three times in para. 49. In addition to listing the whooper swan in the lengthy list of habitat types and species protected in the SPA and SAC (which for reasons already explained would not be sufficient), the paragraph also asserts that the NIS did not record the presence of species which the consultants who reviewed it on behalf of the EPA had recorded, including the whooper swan, and that notwithstanding the fact that whooper swans have actually been sighted at Bunlicky Pond they were not addressed in the NIS and their presence was not excluded. To that extent, but to that extent only, I accept that a particularised case has just about been made in respect of the whooper swan.

91. However, to the extent that this limited case is pleaded, it does not really advance the appellant's position because the argument made on foot of it is both factually incorrect and legally misconceived. It will be recalled that ICL did not submit an NIS with the initial application but submitted an AA screening report that concluded that an AA was not required. The EPA engaged a consultant, RPS, to review this report and that consultant disagreed with the conclusions of the screening report. The consultant's views are set out in a report to the EPA dated November 2018. RPS advised the EPA that an AA screening report should include all of the data required to enable the EPA to make a determination as to the likelihood of a significant effect on a protected site. It then noted that there is a 2005 record in a national database of a whooper swan being sighted outside of the designated SPA site and, apparently, within the development site at the quarry area. It comments that while the quarry would not be an ideal habitat for whooper swans, Bunlicky Pond could potentially provide a suitable over-wintering habitat. It acknowledges that surveys carried out on behalf of ICL may have excluded its more recent presence but notes that this is not explicitly addressed and thus constitutes a "*data lacuna*". The report also commented generally on the robustness of the scientific assessment in the screening report. It then made a number of

recommendations including that the EPA should carry out a full AA and request an NIS from ICL for that purpose. The recommendation advised that the NIS should expressly account for a number of matters including *"the potential presence of at least SCI species namely whooper swan from the SPA from the proposed development site"*. (It would appear that the typographical error replicated in the EPA's correspondence originated here).

92. The EPA took the advice of its consultant and in a request for further information dated 1st November, 2018 it asked for the submission of a number of items including an NIS as defined at Regulation 2(1) of the EC (Birds and Natural Habitats) Regulations 2011, as amended. It required the NIS to account for a number of matters taken *verbatim* (including the typographical error) from the RPS Report. Thus, ICL had to submit an NIS which, *inter alia*, was required to address the potential presence of the whooper swan at the proposed development site.

93. It is important at this point to appreciate that neither RPS nor the EPA were saying that whooper swans were present on the development site or that the revised activity would have any adverse impact on them. Rather they were identifying the possible presence of a protected species outside the SPA and within the development site based on a recorded sighting over a decade earlier. The issue was one which needed to be addressed, even if only to close off the possibility that the development site had become an area used by protected species from the adjacent and partially overlapping SPA. The request to address the issue did not presume that there was any particular importance attached to that species *vis á viz* the proposed revisions to the licence.

94. Unsurprisingly, the NIS submitted on behalf of ICL did address the 2005 sighting of a whooper swan on the development site and indeed the presence of this species on the SPA, the SPA being identified as one of two EU sites in close proximity to the development site and one of eight within a 15-kilometre radius from the site. Under the heading *"Key*

Ecological Receptors" the NIS indicates that site visits were carried out in 2016 and 2018 and habitats identified, described and mapped. A review of data held by the National Biodiversity Data Centre for the area of the development site, including Bunlicky Pond, showed few records of protected species but some occasional sightings of protected bird species including the whooper swan. The NBDC data dating back to 1981 showed 11 sightings of whooper swans within a 10-kilometre radius of the development site - which would not be surprising given that it is a designated species for an SPA which is contiguous with and partially overlaps the ICL site. It notes the recorded sighting within the quarry area but for reasons which are explained doubts that the sighting was accurately mapped. In bird surveys undertaken for the purpose of the NIS, a range of wetland bird species were observed in the western section of Bunlicky Pond and fields north of the quarry but these did not include the whooper swan. No SCI species were recorded in the development site surveys done in either 2016 or 2018. It might be noted that the EPA had requested the submission of an NIS from ICL in respect of the EPA-initiated licence review in 2017 and, therefore, much of the preliminary work necessary to produce a NIS had been carried out prior to the formal request being made in respect of the 2016 licence review application. Based on all of this data, the NIS concluded that the proposed development area was entirely unsuitable for use by the SPA protected species save for occasional transient birds.

95. The NIS went on to systemically identify the EU sites potentially impacted by the proposed development and the reasons for their designation and potential connections between the development site and the protection site. The main concern was the hydrological pathway between the development site and some of the protected sites but a theoretical pathway via emissions to air was also noted. The NIS then conducted an appraisal of the likely effects on the EU sites during both the constructional and operational phases of

the development. Much of the analysis is highly technical dealing with, for example, water quality analysis.

96. Appendix II to the NIS lists each EU site and its protected habitats and species separately and summarises the potential and predicted impacts of the proposed development on them through either of the identified pathways, i.e., water and air, by reference to the target for that species or habitat set by the NPWS conservation objectives. The target in respect of water bird species including the whooper swan is to ensure the long-term population trend is stable or increasing. The potential impact is described as *"population change (reduction) due to disturbance etc."* but the predicted impact is *"none"*. Construction impacts are to be mitigated and there are no expected operational impacts.

97. The Arup Assessment of Atmospheric Emissions Report from December 2018 is included as an appendix to the NIS and the implications of its findings are considered as regards the potential effect of air emissions on the EU sites. The Arup report predicts a reduction in the total concentration of pollutants relative to the existing situation. Thus, the NIS concluded that it was reasonable to conclude there would be no significant effects on the relevant EU sites.

98. This is of course a very brief summary of a detailed document which included a number of technical appendices. The purpose of going through the NIS here is to show that, on foot of the EPA's request, ICL did specifically address the issues raised by RPS, namely the potential presence of an SCI species on the development site and, in particular, the whooper swan is included in bird surveys conducted in connection with the NIS. The appellant is factually incorrect insofar as she contends that the NIS does not address this species. It was addressed and noted to be absent from the licenced site save potentially on an exceptional and transitory basis.

99. The NIS, of course, is not the AA itself. That must be conducted by the decision maker and the public must be afforded an opportunity to comment and to make submissions on the material provided by the developer. However, the decision maker is entitled to accept the conclusions set out in the NIS, and may well do so particularly if no contrary evidence is presented during the public consultation which would suggest the information is incomplete or otherwise incorrect. As it happens, the factual contentions set out at para. 49 of the statement of grounds are directed only to the NIS and not to the AA itself. It is very much open to question whether the appellant could mount an argument to the effect that the AA was unsatisfactory regarding whooper swans based on anything other than the NIS since no other alleged inadequacy is identified with the requisite degree of precision and clarity anywhere in the statement of grounds.

100. Without prejudice to this finding, in this case the inspector both analysed AA criteria in his text and attached a formal AA in tabular form to his report. In that AA he dealt expressly with the River Shannon and River Fergus Estuaries SPA and identified the whooper swan as a qualifying interest for the site. He looked specifically at the potential effects on the site including through emissions to water and at the conditions he had included in the recommended licence which were designed to put controls in place to protect the qualifying interests in the SPA. This analysis grounded this conclusion that there would be no adverse effect on the integrity of the SPA.

101. Whilst there were a number of objections to the proposed determination premised on the complaint that the AA was unsatisfactory, those objections did not focus on the treatment in the NIS or by the inspector of whooper swans. None of the available information, including the bird surveys conducted in connection with the NIS, suggested that any part of the development site was being used by the protected species generally or by the whooper swan in particular. The impacts on species in the protected site are considered and the report

concludes that there will be none. No evidence was adduced to the oral hearing to suggest that the treatment of whooper swans as one of a number of protected bird species in the SPA was inappropriate.

102. In essence, the appellants' argument is premised on the assumption that because the request for an NIS specifically referred to whooper swans, this was somehow a critical species in terms of the analysis that had to be conducted in order for a valid and complete AA to be carried out. This assumption is incorrect. The request identified a gap in the screening assessment which had to be closed before the decision maker could be satisfied that there would be no adverse effect on the integrity of the EU sites in issue. The NIS specifically addressed the issue and closed the gap and then, acknowledging the presence of the whooper swan as a protected species on the adjacent and partially overlapping SPA, dealt with the impact of the proposed development on it and on other water bird species. Consequently, the argument is also without legal merit. In summary the trial judge was correct to exclude a wide-ranging AA argument based on the position of the whooper swan as this ground had not been pleaded. Insofar as a narrower ground limited to an alleged failure in the NIS to record the presence of the whooper swan and to consider the ways in which emissions from the site might impact on them this plea is manifestly without foundation on the basis of the factual evidence and must fail.

103. Finally I might note that issue was also taken with the scope of the arguments made by Ms. Hayes regarding chromium VI and bryophytes. However, as a case is clearly pleaded by her under those headings I will deal with the scope of the pleaded case when dealing with that topic.

Environmental Assessment

104. A significant portion of this appeal concerns arguments made by the appellants to the effect that the EPA failed to properly discharge the obligations on it to conduct an EIA and an AA in respect of this development. There is no dispute that the EPA was obliged to carry out both of these assessments nor that it purported to do so. Instead, the issues raised concern the recording of the output of the assessments and the manner in which various issues were addressed in the course of the assessments. In order to place the discussion of these issues which follows in context, it may be useful to provide at the outset an overview of what the assessments involve and how the courts at national and EU level have treated their requirements.

105. Although EIA and AA represent discrete requirements, they overlap in many respects, and frequently a substantial project such as the one at issue in these proceedings will require that both be carried out before development consent is granted. Both are based on EU directives which have been transposed into Irish law through a series of statutory amendments and statutory instruments. However, because of the complexity of the Irish implementing measures and the fact that they are regularly found in a number of different legal instruments and the frequency with which they are added to or amended, it has become commonplace in litigation to refer to the obligations as described in the parent EU directives rather than by reference to the national measures. Whilst acknowledging that where the EU directives have been transposed into Irish law it is the statutes and statutory instruments which govern the obligation at national level, for convenience I will nonetheless adopt that shorthand.

106. The requirement to carry out an EIA and/or an AA before development consent is granted stems from what is known as the precautionary principle. The underlying premise is that the environment is best protected if it can be ascertained in advance of permitting a

development or activity to proceed what the effects of that development or activity are likely to be. The decision maker can then attach conditions to the development consent to prevent, reduce or mitigate the expected environmental consequences or, if the development or activity cannot be conditioned so as to operate within environmentally acceptable parameters, to refuse consent. This aligns with the polluter pays principle which refers, not just to the cost of an environmental cleanup if a polluting event occurs, but to the fact that a developer must bear the additional costs entailed in order to meet such conditions. In addition, the basic material on foot of which the assessment is to be conducted must be provided by the developer and will usually consist of a series of expertly prepared reports dealing with scientific, technical, ecological and other aspects of the development.

107. However, an assessment is not just a dialogue between the developer and the decision maker. In addition to the access to justice provisions of the Aarhus Convention previously discussed, Article 6 of that Convention requires that *"the public concerned"* be provided with the necessary information regarding any application for development consent within an environmental decision making process and that the process in question must afford the public concerned the opportunity to make comments or submissions on the proposal at an early stage and prior to any decision being made. Under Art. 6(7) the procedure for public participation may be written or oral and must allow the public to make comments and to submit information, analysis and opinions that it considers relevant to the proposal. Although Ireland has not yet incorporated the Aarhus Convention into domestic law, its provisions are nonetheless relevant by reason of the EU's accession to and implementation of the Convention (see *Conway v Ireland* [2017] 1 IR 53). These requirements are given effect to at EU level by the Public Participation Directive 2003/35/EC and, in the context of this application, at Art. 6(3) to (6) of the EIA Directive 2011/92/EU as amended.

108. Although public participation in appropriate assessment under the Habitats Directive seems to be at the discretion of the decision maker under Art. 6(3), by reading that directive in conjunction with the Aarhus Convention the CJEU has adopted a fairly broad understanding of when public participation is *"appropriate"* and therefore mandatory in this context (see the *Slovak Brown Bear* Case C-204/09, 8th March 2011).

109. As it happens, any debate as to whether public participation provisions of the Aarhus Convention have effect in Irish law through the adoption of measures necessary to give effect to them at EU level is largely irrelevant since Irish planning legislation has traditionally and certainly since 1963 afforded the public a statutory right to participate in decision making processes leading to decisions in this area. Subsequent environmental legislation including the EPA Act 1992 (which predates the Aarhus Convention) has adopted a similar approach. Equally, we do not have to be concerned with identifying *"the public concerned"* since Irish legislation has traditionally afforded the general public the right to participate in these decision-making procedures without any restriction other than compliance with relevant time limits. Thus, as a matter of Irish law and now also of EU law, both appellants were entitled not just to participate in the decision-making process leading to the grant of a revised licence but also in the EIA and AA which were an integral part of that process.

110. These features are common to both forms of assessment, but they are otherwise quite distinct both as to when the obligation to conduct an assessment arises, what that assessment must entail and the legal significance of the outcome of the assessment. The following is intended as a brief and by no means comprehensive overview of each type of assessment.

111. The requirement for EIA was introduced by Directive 85/337/EC. That Directive was subsequently amended, consolidated, recast and ultimately replaced in 2011 by Directive 2011/92/EU which was itself amended in 2014. As one of the issues in the appeal concerns whether the 2014 amendments should have been applied to this application I will, insofar as

possible use neutral descriptions in this overview. An EIA is required where, by reason of the nature, scale or location of a particular project (defined to include both physical development and an activity in the IED sense) it is likely to have significant effects on the environment. A key feature of EIA is that it may be integrated into existing procedures in Member States for the granting of development consent. The types of projects subject to EIA are listed in two annexes to the EIA directive, the first of which lists projects which must be assessed in all cases and the second of which lists projects which may, depending on their particular characteristics, require assessment. Member States may set thresholds by reference to which an assessment in respect of an Annex II project becomes mandatory. Installations for the manufacture of cement come within para. 5(b) of Annex II.

112. The process to be followed once an EIA is required is set out in the directive. The detail of some of the steps to be taken was altered by amendments effected in 2014 and a definition of *"EIA"* introduced which reflects some of these changes. Essentially, once it has been determined that an EIA is required (and there is a procedure through which this can be done if it is not clear), the developer is obliged to provide the decision maker with certain information about the project and its environmental effects. In Ireland that information was provided by way of an Environmental Impact Statement (EIS) but under the 2014 Directive it is to be submitted in the form of an Environmental Impact Assessment Report (EIAR).

113. The public must be notified of the application and where the information can be accessed and allowed to make submissions on it. The decision maker must take the results of this consultation into account in the development consent procedure. Under Art. 3 the EIA must *"identify describe and assess in an appropriate manner"* the direct and indirect effects of the project on certain factors. The description of these factors is altered in a material way by the 2014 amendments. However, the essence of the obligation remains that an EIA must comprise a holistic assessment of the effects of the development on factors such

as the human population, species, habitats and other environmental media which may be affected.

114. At the conclusion of the process under the 2011 Directive the decision maker was obliged to inform the public of the outcome and to provide information which included the main reasons and considerations on which the decision was based and to include a description of the main measures to avoid, reduce and offset major adverse effects. Under the 2014 Directive the decision maker's EIA must include a reasoned conclusion of the significant effects of the project taking into account its examination of the EIAR, any supplemental information provided by the developer and any relevant information provided to the public consultation process and, where appropriate, its own supplementary examinations. It must also include the integration of the decision maker's reasoned conclusion into the decision to grant development consent. The public must still be informed of the outcome.

115. Although the detail of what is required to be considered and how the output of the EIA must be expressed has changed between the 2011 and 2014 Directives, the essential architecture remains the same. The developer must provide detailed information on foot of which, after public consultation, the decision maker must conduct an assessment to identify the likely impacts of the project on the receiving environment. If a project is to be permitted, conditions should be attached to reduce or offset the negative impacts of the development as identified in the assessment. In other words, the outcome of the assessment shapes the form of the consent likely to be granted by a decision maker and, of course, may lead to its refusal. There is however no legally stipulated threshold at which the significant effects of a project become too great for the receiving environment to be expected to tolerate it. It is in each case a matter for the decision maker, albeit informed by the assessment.

116. The need for an appropriate assessment is not defined by the nature or scale of the project but by the possibility of it having a significant effect on an EU site. A small scale project in an area of particular ecological sensitivity will likely require an assessment whereas a larger project in a less sensitive area might not. EU sites are designated through a process set out in the Habitats Directive involving interaction between the Member State which proposes them and the Commission which lists them. EU sites under the Habitats Directive are designated for the purposes of protecting identified habitat types or species (flora and fauna) which are set out respectively in Appendix I and II of the directive. Member States are required to establish the necessary conservation measures which correspond to the ecological requirements of the natural habitat types and species present on the sites. In Ireland this work is done by the NPWS through the formulation of conservation objectives for the sites. Sites designated under the Habitats Directive are called Special Areas of Conservation (SAC).

117. Sites designated under a separate directive, known colloquially as the Birds Directive 1979/409/EEC, which deals with the conservation of wild birds, are known as Special Protection Areas (SPA). Under Article 7 of the Habitats Directive, the obligation to conduct an AA of the impact of a proposed development on a protected site applies to SPAs in exactly the same manner as it does to SACs and, for convenience, both of these are referred to as EU sites (or as "protected sites"). Because sites are designated for different purposes under the two directives they may overlap on the ground. In this case the sites upon which most of the argument was focused were the River Shannon and River Fergus Estuaries SPA and the Lower River Shannon SAC. The contours of these sites overlap in part, particularly in the area adjacent to the licenced site. The SPA includes a portion of Bunlicky Pond, i.e., the portion lying to the northeast which is severed physically but not hydraulically from the remainder by the N18 road. As Bunlicky Pond lies within the licenced site, the licenced site

includes some of the SPA. The licenced site is contiguous with the boundaries of the SAC at the same location. The material sometimes describes the nearest EU site as being 700m away (this is expressly the case in the NIS). This refers to the distance between the SPA and that portion of ICL's overall site on which the cement manufacturing plant is located and which was the subject of the related planning application. The emissions to air which were the focus of arguments made by both appellants emanate from this portion of the site.

118. The Habitats Directive is largely non-prescriptive of the form which an AA must take. That detail has been filled in by the CJEU and, in this jurisdiction, by the national implementing measures which are to be found in Part 5 of the EC (Birds and Natural Habitats Regulations) 2011. The language of Art. 6(3) of the Directive suggests that the process will have two stages. Initially a decision must be made as to whether the project is likely to have a significant effect on any EU site. This is described as the screening stage and it is accepted that the threshold is a low one. If the project is likely to have a significant effect on an EU site, the decision maker must then carry out a full appropriate assessment to ascertain whether the project will *"adversely affect the integrity of the site"* having regard to its conservation objectives. It may be useful to note that the initial threshold of significance does not distinguish between positive and negative effects on EU sites but the substantive test, when a full AA is carried out, focuses on adverse or negative effects on the integrity of the site. This may be of some relevance here as the modelling of air emissions in the 2018 report appended to the NIS suggested that the ground level concentrations of most of the pollutants of concern would in fact be reduced. The 2011 Regulations provide that where an AA is required the developer must submit an NIS (article 42), the public is to be given notice and afforded an opportunity to make submissions and these submissions along with other stipulated material must be considered by the decision maker before any decision is reached.

119. Thus, whereas the requirement for an EIA is determined by the nature, location and scale of the project itself, the need for an AA is determined by reference to the potential effects of a development, regardless of its nature or scale, on a protected site. An EIA is general in nature, designed to ascertain the likely effects of a project on a range of factors and to assess their interaction in a holistic way. An AA is more focused, looking specifically at the effect the development might have on a protected site and, even more specifically, on the site's conservation objectives which usually pertain to the presence of the particular birds, habitats and/or species for which it has been designated. In practice, AA tends to be very technical and scientific in nature. An EIA may be technical and scientific in part but other parts (for example assessment of the effects of a project on cultural heritage) will be less so.

120. These differences, although important, are not the most fundamental difference between the two types of assessment. Where an AA is required the decision maker cannot grant development consent unless it is satisfied that the development will not have an adverse effect on a EU site. This threshold is accepted as being a very high one. In *Kelly v An Bord Pleanála* [2014] IEHC 400 Finlay Geoghegan J. described the determination that must be made at this stage as a pre-condition to the jurisdiction of the decision maker to make a decision to grant development consent. (There are limited circumstances in which development consent can be granted where there has been a negative outcome of an AA. These require there to be imperative reasons of overriding public interest justifying the development, compensatory measures and in certain circumstances Commission approval under Art. 6(4). These provisions are rarely invoked in Ireland.) The outcome of an EIA, even where that is negative, does not determine the jurisdiction of the decision-maker to grant development consent.

121. The height of the threshold that must be met in terms of scientific certainty before a decision maker can positively conclude that a development will not have an adverse effect on the integrity of an EU site is evident from a number of decisions of the CJEU (for example *Waddenzee* Case C-127/02 [2004] ECR 1-7405; *Commission v Spain* Case C-404/09 [2011] ECR 1-11853 and *Sweetman v An Bord Pleanála* Case C-258/11 ECLI:EU:C:2013:220). These establish *inter alia* that all aspects of a project capable of having an effect on the site must be identified in light of the best scientific knowledge in the field; the decision maker must be satisfied that *"no reasonable scientific doubt remains as to the absence of an adverse effect"*; that an assessment will not be appropriate if it contains gaps or lacunae and lacks complete, precise and definitive findings or conclusions capable of removing all such scientific doubt. In summarising the effect of these decisions Finlay Geoghegan J. stated in *Kelly* that *"if an appropriate assessment is to comply with the criteria set out by the CJEU in the cases referred to then it must, in my judgment, include an examination, analysis, evaluation, findings, conclusions and a final determination"*.

122. It is clear from the case law that it will not suffice for the decision maker simply to conclude that the project will not have adverse effects on any European site. As a matter of both EU and Irish law, those who have participated in the decision-making process in particular and the public generally are entitled to be informed of the reasons underlying that conclusion. In *Kelly* Finlay Geoghegan J. held that those reasons must include complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed development on the EU sites in light of the conservation objectives of the sites. As one of the grounds in the appeal raised by Ms. Foley concerns where the AA is to be *"found"* I will return to the question of how the conclusions in an AA must be framed and how the process is to be recorded.

123. At this stage it is sufficient to observe that the very high threshold that must be met in an AA in order for a decision maker to have jurisdiction to grant consent has led applicants in cases of this nature to focus on the minute detail of the AA carried out by the decision maker in the hope of identifying a gap or a lacuna as a result of which the court will hold the findings to be incomplete and thus incapable of removing all scientific doubt as to the potential for an adverse effect on a European site. This presents difficulties for the courts because the material under examination will frequently, as here, be very technical and scientific in nature. Courts must be careful not to confuse a lack of understanding on the part of the judiciary of what may be a complex scientific decision with a lacuna or gap in the assessment on the part of the decision maker. I will address this issue further below.

Affidavits of Expert Witnesses

124. Following from the discussion in the preceding paragraphs, an issue arose on the hearing of the appeal as to the admissibility of certain affidavits sworn by scientific experts who had not attended or given evidence at the oral hearing. The purpose of these affidavits was to take issue with the scientific evidence which had been adduced by ICL and, in circumstances where it was largely uncontroverted, was accepted by the EPA as providing the necessary basis upon which it could be satisfied that no reasonable scientific doubt remained. The issue really concerns the *Hayes* appeal as the expert witness who has sworn an affidavit in the *Foley* proceedings, Dr. Shanahan, was instructed as an expert to make both written and oral submissions to the oral hearing. In addition, one of the witnesses who swore an affidavit on behalf of Ms. Hayes, Dr. Zabetakis, likewise attended the oral hearing and gave evidence, albeit on behalf of a party who is not participating in these judicial reviews. However, affidavits were sworn and filed on behalf of Ms. Hayes by four scientific experts who had no prior involvement in the decision-making process. One of these can be

discounted because the issue with which it deals (the potential impact of the development on bottle nosed dolphins, a protected species and qualifying interest for the SAC) is no longer live on the appeal.

125. That leaves three affidavits filed on behalf of Ms. Hayes sworn by persons who undoubtedly have relevant expertise with a view to putting evidence before the court which was not available to and therefore not considered by the EPA when it made its decision. The evidence in question is directed to the findings made by the EPA in the course of its AA and is intended to establish gaps or lacuna in the assessment carried out by the EPA and in many instances simply to establish that the EPA's conclusions are incorrect.

126. By way of background, each of the appellants issued their judicial review proceedings grounded only on affidavits sworn personally by each of them. In their opposition papers both the EPA and the notice party took issue with the fact that the appellants, who do not themselves possess scientific expertise in the fields addressed, purported to aver to the complex scientific facts underlying their pleaded cases. (It transpires that Ms. Hayes is a qualified pharmacist in addition to being a solicitor but whilst this undoubtedly gives her a better understanding of the scientific issues than a lawyer might usually be expected to have, it does not qualify her as an expert in any of the areas in question.) The expert affidavits were filed in response to these pleas in the opposition papers and, in a number of instances, contained reports specifically created for the purposes of the judicial review proceedings.

127. At the outset I should make it clear that I do not accept that objection can be taken to these affidavits merely because they were sworn outside the eight-week period within which the proceedings had to be issued under s. 87(10) of the EPA Act, 1992. The statutory time limit applies to the issuing of proceedings within which all of the grounds on which an applicant intends to rely must be pleaded. It does not prevent an applicant from adducing evidence in support of the pleaded grounds outside of that time limit and no special leave is

required to file such an affidavit. Insofar as the respondent and notice party suggest that the cases relied on by the appellants were not properly verified on affidavit within the 8 week period in the absence of this expert evidence, I think it would be an overly strict application of the Rules to strike out the technical pleas to which this evidence relates in circumstances where there is already a strict statutory time limit applicable to the case. At the same time an affidavit filed outside the eight-week period cannot be relied on to extend the pleaded case unless leave has also been granted to amend the statement of grounds.

128. However, that does not dispose of the question in this case as to whether the affidavits are admissible. Objection was taken to their admissibility at the hearing of the action before the High Court on the basis that they sought to add to the record of evidence on which the EPA based its decision. The High Court did not formally rule on the matter. Counsel for ICL describes the issue as having been side-stepped in circumstances where it appears that in her written submissions to the High Court Ms. Foley stated that she was not relying on anything that was not on the EPA's file, a position which her Counsel confirmed during the hearing before the High Court. Neither the affidavits nor the reports exhibited in them were opened in the course of the hearing nor are they referred to by the trial judge in his judgment. However, the affidavits were submitted in the books of pleadings given to the trial judge and they were never formally withdrawn.

129. Counsel for Ms. Hayes sought to open these affidavits on the appeal when the same objection was taken by the respondents. Counsel argued that he was entitled to rely on the affidavits to explain why the issues raised by Ms. Hayes are significant and why they should have been expressly dealt with by the EPA in its decision. He also argued that the court did not have the expertise available to EPA and the affidavits were intended to fill that gap. With respect, I find the latter argument entirely unpersuasive. It is not the task of a litigant to fill

gaps in the court's expertise in order that the court can then consider the minutiae of the decision the EPA has made.

130. The EPA was established as the statutory body with the requisite expertise to assess and determine applications of this type which entail considerable detailed scientific evidence and the assessment of complex technical issues. The process is an open one in which the public have a number of opportunities to participate and are expressly entitled to engage scientific experts to assist them in the preparation of submissions and to give evidence on these technical issues at any oral hearing. Indeed, this case is a good example of an oral hearing at which evidence was heard from a number of experts in addition to those called by the developer - although no expert witness was called by Ms. Hayes. Thus the EPA is the independent body responsible for resolving any conflict in the scientific evidence. It cannot do this if participants in the process choose not to engage with the scientific evidence which is adduced by the developer before the EPA but then seek to present new and potentially contrary evidence to the court. Indeed, I note that no explanation has been given as to why this evidence was not tendered to the EPA at the oral hearing.

131. In reviewing the legality of the EPA's decision, the court is not tasked with re-evaluating the expert evidence. Indeed, precisely because it is a court and not a specialist tribunal, the court could never perform such an exercise satisfactorily. It goes without saying that evidence adduced by one side to litigation in order to challenge the decision maker's conclusions could never be relied on by the court as filling a gap in its own expertise. This is so, no matter which side seeks to adduce expert evidence that was not before the decision maker.

132. However, that is not entirely the end of the matter. As noted above, the conclusions a decision maker must reach on AA must be complete and definitive and may not contain gaps or lacunae. Clearly an applicant in judicial review proceedings is entitled to contend that the

appropriate assessment carried out by a decision maker is not complete and that it contains gaps. It seems self-evident that gaps may not be apparent to the court on a review of the decision maker's file unless a person with the requisite expertise and understanding of the issues goes on record to say that there is an issue of importance that has not been addressed. In other words, I do not think that the negative which is required to be shown in order to succeed in a challenge to an AA (i.e., the incompleteness of the assessment) can be established by simply looking at the record. The record may, on its face, appear complete and certainly may appear so to a court which lacks the technical expertise to interrogate the evidence of scientific experts. An applicant must be permitted to file affidavits, including expert affidavits to make that case.

133. At the same time, it is important to bear in mind that expert affidavits cannot be filed simply to take issue with evidence that was uncontradicted before the decision maker or to show the decision maker's conclusion was wrong. Asking the court to identify a failure to address an issue *simpliciter* is materially different to asking the court to consider additional evidence on an issue which was addressed in order to suggest that a different conclusion ought to have been reached. The line may be a fine one, but it is nonetheless an important one. The court is not conducting an appropriate assessment. It is not in a position to evaluate the weight which should be attached to the evidence of particular experts and cannot be asked to prefer the evidence of an expert who did not give evidence or make a submission to the EPA over the evidence of those who did. The experts who gave evidence might well have been able to deal with the issues sought to be raised in the proceedings if those issues had been raised in the course of the process.

134. In this instance the affidavits on which Ms. Hayes seeks to rely cross the line frequently. They undoubtedly go further, sometimes much further, than saying (albeit from an expert perspective), "here is an important issue or an important aspect of an issue which

was not addressed but should have been addressed and this is why". Instead, they purport to make detailed submissions of a scientific nature both generally and by way of critique of the developer's documentation. It is not always clear from the affidavits exactly what the expert was asked to consider before the affidavit was sworn. In at least one instance it appears that the expert was asked to respond to a discrete scientific query posed to him by Ms Hayes herself (who is acting as solicitor on her own behalf).

135. In an interim ruling delivered during the course of the appeal hearing my colleague Ní Raifeartaigh J. permitted counsel for Ms. Hayes to refer to the affidavits *de bene esse* subject to the rider that they could not be deployed for the purposes of dealing with the merits of the EPA decision. She also allowed the respondent and notice party to object at any time to the manner in which the affidavits were being used. In addressing the issues to which the affidavits relate (chromium VI and bryophytes) I propose only to have regard to them to the extent to which they suggest that something was omitted from the EPA's consideration as a result of which the AA was incomplete in the sense discussed in the *Sweetman* and *Kelly* decisions. I do not propose to consider them for the purpose of allowing the appellant to dispute uncontradicted evidence which was before the EPA nor the EPA's decision to accept that evidence.

Scope of Review

136. The final issue to be considered at the outset is two-fold - the scope of the High Court's jurisdiction in judicial review of the decision of an expert tribunal such as the EPA and the scope of this court's appellate jurisdiction on an appeal against the decision of the High Court bearing in mind that judicial review is a discretionary jurisdiction. I will deal with the second aspect first as it is the more straightforward.

137. It is now well-established that it is open to an appellate court to substitute its own discretion for that of the trial court, albeit that great weight or deference should be paid to the views of the trial judge. In particular, where a case is heard on affidavit rather than oral evidence, there is no practical factor limiting the ability of the appellate court to form a different view on the same material.

138. The most recent authoritative consideration of these issues as regard this court is that of Collins J. in *Betty Martin Financial Services Limited v ESB DAC* [2019] IECA 327 between paras. 35 and 41 inclusive. Summarising his conclusions, the position is as follows:

- Whilst the Court of Appeal will pay great weight to the views of the trial judge, the ultimate decision is one for the appellate court, untrammelled by any *a priori* rule that would restrict the scope of that appeal by permitting the appellate court to interfere with the decision of the High Court only in cases where an error of principle was disclosed (*per* Irvine J. in *Collins v Minister for Justice* [2015] IECA 27 applying *Lismore Builders Limited v Bank of Ireland Finance Limited* [2013] IESC 6). Consequently, the appellant is not required to establish an error of principle as a prerequisite to the Court of Appeal reaching a different conclusion to the High Court.
- However, in order to displace the order of the High Court in a discretionary matter, the appellant should be in a position to establish that a real injustice will be done unless the High Court order is set aside. It is not sufficient for the appellant simply to establish that there was a better or more suitable order that might have been made (*per* Irvine J. in *Lawless v Aer Lingus* [2016] IECA 235 and Finlay Geoghegan J. in *McCoy v Shillelagh Quarries Limited* [2017] IECA 185).

- Where the High Court does not explain its basis for taking a particular view on a contested issue or fails to engage appropriately with the arguments made, that will necessarily affect the weight to be attached to a trial judge's view on appeal (*per Doyle v Banville* [2018] 1 IR 505).
- The potential for interfering with the exercise of a discretion by the High Court is significantly greater where the High Court does not give sufficient reasons for its decision such that the parties cannot understand the basis upon which the discretion has been exercised (*per Law Society v Callanan* [2018] 2 IR 195).

139. In this case it is pertinent to bear in mind that although judicial review is a discretionary remedy, the trial judge did not base his decision on the exercise of any judicial discretion. This is because the exercise of discretion in judicial review arises principally at a point where the court has determined that the legal grounds upon which an applicant challenges the decision have been made out. If they have, the court then has to decide if relief should be granted and if so, the form that relief should take. Factors such as delay, acquiescence, the impact of the grant of relief on third parties and the public interest may operate against the granting of relief which might otherwise lie. In the judgment under appeal the trial judge decided all of the legal issues against the appellants. Therefore, the circumstances in which he might have been called upon to exercise a discretion as regards the grant of relief or the form of that relief simply did not arise. It follows that in deciding this appeal against the High Court's decision on those legal issues, this court is not constrained, even to the extent of showing great deference to the views of the trial judge. An appellate court always has jurisdiction to correct legal error. The conclusions reached by the trial judge on points of law are either correct or they are not. If they are not and one or both appellant has made out a legal basis for the grant of relief then this court may then have to exercise a discretion regarding the relief, if any, to be granted. This will be dealt with in due course if it arises.

140. The more complex aspect is the scope of review of the EPA's decision *per se*. On the enactment of the Public Participation Directive it was initially argued that the obligation to provide access to a review procedure *"... to challenge the substantive or procedural legality of decisions, acts or omissions"* subject to the public participation provisions of the directive was not satisfied if the scope of judicial review was limited as understood from the decisions in *The State (Keegan) v Stardust Compensation Tribunal* [1986] IR 642 and *O'Keeffe v An Bord Pleanála* [1993] 1 IR 39. However, as pointed out by Clarke J. in *Sweetman v An Bord Pleanála* [2007] IEHC 153 that argument assumes that judicial review has a narrower scope than is actually the case. He stated as follows (at para. 6.12 of his judgment): -

> *"6.12 Firstly it is important to remember that a court, in judicial review proceedings, is not confined to the irrationality test identified in O'Keeffe v An Bord Pleanála. That is but one ground which can be advanced. A court is also entitled (and indeed is duty bound) to consider matters such as whether the decision maker had regard to factors which ought not properly have been included in the consideration or failed to have regard to factors which should properly have been considered. O'Keeffe irrationality only arises in circumstances where the decision maker properly considered all of the matters required to be taken into account and did not take into account any matters which should not. The limitations inherent in the O'Keeffe irrationality test, therefore, only arise in circumstances where all, but only, those matters properly considered were taken into account and where the decision maker comes to a judgment based on all of those matters. It is in those circumstances that the court, by reason of the doctrine of deference, does not attempt to second guess the judgment of the person or body concerned provided there was material for coming to that decision. In particular the court does not attempt to re-assess the weight to be attached to the relevant factors.*

6.13 The overall jurisdiction is not, therefore, as narrow as a consideration of O'Keeffe irrationality alone might suggest."

141. In addition, the *O'Keeffe* test under which a court does not examine the evidence before the decision maker save to satisfy itself that there was evidence before it upon which the decision could reasonably have been based was the subject of detailed analysis and re-evaluation by the Supreme Court in *Meadows v Minister for Justice* [2010] 2 IR 701. Given that five separate judgments were delivered in *Meadows*, four of which expressed differing views of whether and to what extent the *O'Keeffe* test should be modified, if at all, it can be difficult to state definitively where the law currently stands regarding the scope of a court's jurisdiction to examine the subject matter of a decision under review rather than the process by which that decision was reached. This is subject to the *proviso* that the strictness of the *O'Keeffe* test appears to have been modified, at least in cases where the decision under challenge impacts directly on a fundamental right of the litigant, in which case the courts can scrutinise the facts to ensure that the decision is proportionate. Leaving aside altogether the extent to which the recognition of a constitutional right to an environment consistent with human dignity (*per* Barrett J. in *Friends of the Irish Environment v Fingal County Council* [2017] IEHC 695) has survived the analysis of its constituent parts by the Supreme Court in *Friends of the Irish Environment v Government of Ireland* [2020] IESC 49, neither appellant has pleaded their case as a rights-based challenge of any sort and therefore the question of a proportionality analysis in that sense does not arise.

142. As a general rule, in examining a judicial review of this nature a court must consider whether the decision is legally correct, whether the decision maker has followed fair procedures in reaching it, whether all relevant material has been properly considered and all irrelevant material excluded and whether sufficient reasons have been provided to explain the decision made. If all of these requirements are satisfied then the court may look to see

if there was material before the decision maker upon which any factual conclusions reached could reasonably be based. This does not entail the court assessing the weight of the evidence preferred by the decision maker against the weight of any contrary evidence and is not a merits-based review. It is an exercise designed to ascertain that there was evidence which would not have been rejected out of hand by a sensible or reasonable decision maker and upon which the decision maker could and did rely.

143. I say that this is the position as a general rule because in cases where a challenge to an environmental decision includes a challenge to an appropriate assessment carried out in the course of making that decision, it may not be sufficient for a court simply to satisfy itself that there was some evidence before the decision maker on which the decision can be said to have been reasonably based. The onus lies on a decision maker in carrying out an appropriate assessment to ascertain beyond a reasonable scientific doubt that the development will not have an adverse effect on any EU site. To achieve this level of scientific certainty, the decision maker's assessment must be complete and not have gaps or lacunae. In assessing whether the decision maker has met this standard, a reviewing court must do more than merely satisfy itself that there was some evidence or material before the decision maker which justified the ultimate conclusion that the development would not have such an adverse effect. The court must be satisfied that the rejection of any contrary evidence and the explanation for such rejection, if any, does not create a gap or lacunae in the context of reasonable scientific certainty as a result of which the assessment will not be complete. In my view, this exercise goes further than the minimalist approach towards the evidence before a decision maker embodied in the *O'Keeffe* test. It requires some level of engagement by the court with the evidence that was before the decision maker and particularly any evidence which is asserted to be contrary to the conclusion ultimately reached. In most cases

this evidence has not been *"rejected"* as such, but for reasons which may or may not be adequately explained, other evidence has been preferred.

144. In passing I might observe that the same level of analysis may not be required of a court where the conclusion of an appropriate assessment is negative - *i.e.*, the decision maker is not satisfied as to the absence of any adverse effect on a European site. A negative appropriate assessment is based on the decision maker's doubt whereas a positive one must be based on certainty. A refusal of development consent will automatically follow a negative assessment such that the possibility of an adverse effect on the EU site will not be permitted to materialise. Although the intending developer will doubtless be affected by a refusal, the environment will generally not be (although I note in this case ICL contend that the grant of revisions to the existing licence will result in a decrease in emissions and a reduction in the facility's carbon footprint). From a legal perspective it is easier for a court to conclude that a reasonable doubt exists than to be satisfied of the absence of such doubt to the requisite level of scientific certainty.

145. The limits of the court's examination of evidence in order to be satisfied as to the legal correctness of the decision maker's conclusion on an appropriate assessment are not clear and may not be capable of precise definition untethered from the facts of any particular case. On the one hand it does require more than the court merely being satisfied of the existence of some evidence on which the decision maker could reasonably have based its conclusion. On the other hand, a review is not a full appeal on the merits and the court does not step into the shoes of the decision maker to re-evaluate all of the evidence and, in effect, to conduct a further appropriate assessment. This much is clear from the language used in both Art. 9(2) of the Aarhus Convention and Art. 11 of the EIA Directive which does not provide for a right of appeal and instead is phrased in terms of a *"review procedure… to challenge the substantive and procedural legality"* of a decision.

146. Thus, a court is entitled to and, depending on the case made, must examine the evidence before the decision maker to ensure that where contrary technical or scientific evidence has been adduced to the decision maker, any conclusion reached is justified in terms of the level of scientific certainty required. In conducting this examination it has to be borne in mind that the decision maker possesses a level of expertise regarding the subject matter of the assessment which the court does not have. The extent to which the decision maker has provided reasons for its conclusion on any disputed aspect of an appropriate assessment will inform, if not delineate, the scope of the court's examination.

147. The taking of a challenge on appropriate assessment grounds does not impose on the court the onus of conducting the appropriate assessment itself nor of revisiting all of the evidence related to it. Instead, its examination will be focused on those aspects of the appropriate assessment conducted by the decision maker which are the subject of specific pleas of inadequacy or illegality. The court can also examine the evidence to ascertain whether there are gaps or lacunae in it which would preclude the decision maker from being satisfied as to the absence of adverse effects on an EU site. Again, the extent of the court's examination in this regard will be delineated by the case pleaded by an applicant.

148. In conducting this exercise, the court may reach a practical limit to which I have already adverted in this judgment. The EPA is an expert decision-making body which has been conferred by statute with jurisdiction in this highly specialised and technical field. It is probably fair to observe that in recent times courts have been somewhat less inclined to show the extreme deference to expert decision makers that was historically the case. In many instances this is because the expertise of the decision maker is very general in nature, *e.g.*, public servants assigned to a particular decision-making function within a department or lawyers appointed in a part-time capacity to a statutory body for the purposes of making a particular category of decisions. In these examples the expertise possessed by the decision

maker is very unlikely to exceed that of a court. That this is manifestly not the case as regards a body such as the EPA will be evident for much of the material under discussion in the succeeding sections of this judgment.

149. Therefore, in my view there is a need for deference to be shown to the analysis carried out by the EPA in respect of this licence review application. I mentioned previously that the substantive content of the CID and BAT conclusions for the cement manufacturing industry is largely unintelligible to me as a judge. The same can be said of much of the material in the EIS and the NIS, particularly the detailed reports and analyses in the technical appendices to these documents. However, they were clearly understood by their intended audience, namely the EPA. There is an extended dialogue managed by EPA officials in the form of requests for and receipt of further information, the conduct of the oral hearing and the presentation of reports to the board of the EPA. In circumstances where the court does not have the technical expertise to interrogate and understand in detail the evidence that was before the EPA there is a particular need for the court to be cautious about finding the EPA's approach to that evidence to have been legally deficient in any way. This is not to preclude such a finding, if it is warranted, but to sound a note of caution about reaching such a conclusion merely because an expert (particularly an expert who did not participate in the process) calls into question the outcome of the assessment after it has been conducted.

Which EIA Directive

150. The case made by both appellants regarding whether the application for review of its licence made by ICL in May 2016 was subject to the requirements of the 2011 EIA Directive *simpliciter* or to that Directive as amended in 2014 is identical. Simply put, the amendments to the 2011 EIA Directive made by the 2014 EIA Directive came into effect on 16th May, 2017. Applications requiring an EIA made – or more precisely initiated - before that date

remained subject to the 2011 Directive but those made after that date were subject to the revised provisions of the 2014 EIA Directive. The changes are material in some respects, particularly as regards the factors by reference to which the assessment is to be conducted under Art. 3 and, by extension, the nature and form of the material which must be submitted by the developer under Art. 5 and also the manner in which the output of the EIA is to be expressed by the decision maker. Therefore, if the incorrect version of the EIA Directive was applied, it will be very difficult for the decision maker to argue that its assessment was legally valid.

151. I note that the EPA pleads that although it conducted the EIA under the 2011 Directive it had regard to the requirements of the 2014 Directive and was satisfied that these were also complied with. Whilst it may be the case that the substantive assessment would not vary depending on which directive was applied, given the extent of the procedural changes between the two directives I doubt compliance with one could establish compliance with the other. [Note: the 2014 EIA Directive makes changes by way of amendments to the EIA regime under the 2011 EIA Directive. It does not provide for a distinct assessment under its own terms. For convenience I shall use the shorthand of discussing whether the 2011 or 2014 Directive applies whilst acknowledging that this is not strictly speaking legally accurate].

152. The reason the appellants argue the 2014 Directive applied arises from repeated requests for further information made by the EPA after the submission of the application for review by ICL in 2016. An EIS was submitted with that application, the same EIS having already been submitted to the planning authority in connection with the related application for planning permission. The EPA made requests for further information in July and October 2016, November 2018 and February and May 2019 and ICL responded by providing the requested information in each case.

153. The EPA engaged an external consultant, RPS, to review the EIS (the same consultant was engaged to review the NIS). On 5th February, 2019 RPS reported advising that whilst the EIS was an *"well-structured and informed document that systematically addresses the key environmental topics and requirements listed in EIA Directive 2011/92/EU"* there were *"a number of minor omissions"* and that further clarification and information should be sought in this regard. Information provided by ICL in response to previous requests for further information was factored into this assessment. The report also noted that the EIS had been accepted by An Bord Pleanála in the course of the planning process.

154. On 15th February, 2019 the EPA issued a request for further information regarding the EIS largely on the terms recommended by RPS. That request was headed *"Notification in accordance with Regulation 11(2)(b) of the EPA Licencing Regulations 2013*". The text of the letter stated that the EPA had assessed the information submitted *"and determined that the EIS does not comply with Art. 94 of the Planning and Development Regulations"* and that *"the EIS does not adequately identify, describe and assess the direct and indirect effects of the proposed development on the environment"*. A number of paragraphs of the request asked for information provided to the planning authorities during the course of the planning process also be provided to the EPA and to clarify any changes to the phasing of the development required due to the fact that An Bord Pleanála had granted a seven year planning permission for the infrastructural development rather than the requested 10 year permission. Other items requested the underlying details, data or analysis in respect of topics already covered in the EIS. I note that earlier (1st November, 2018) and later (29 May, 2019) requests for information from the EPA referred to Regulation 10(2)(b)(ii) of the Licencing Regulations 2013 rather than Regulation 11(2)(b). I do not think that anything turns on this.

155. ICL duly provided the requested information in April 2019 and on 3rd September, 2019 the EPA formally wrote to ICL confirming that its EIS would now comply with Art. 94 of

the PDR. For the purpose of the discussion which follows it might be noted that the following day the EPA's inspector issued his report and made a recommendation that a revised licence be granted in respect of the activity.

156. It might be useful at this point to outline the structure of the EPA licencing regulations (SI 137 of 2013) insofar as they relate to the receipt of licence applications required to include or be accompanied by an EIS. Regulation10 sets out the procedure to be followed on receipt of an application for a licence. Where the EPA considers that the application complies with reg. 9 (which sets out the mandatory contents of such application) it must send the applicant an acknowledgment which should include the date of receipt. Under reg. 9(2)(d) and (e) the need for an EIS to accompany an application is determined initially by whether an EIA was carried out by the planning authority in respect of any related planning application, in which case the EIS submitted with the planning application should also be submitted to the EPA. If the EPA is of the view that the licence application does not comply with reg. 9, then, depending on the extent of the failure, it can either reject the application or seek further information under reg. 10(2)(b)(ii).

157. Regulation 11 contains an analogous provision regarding environmental impact statements. Under reg. 11(1) an EIS is required to comply with article 94 of the Planning and Development Regulations 2001 (which in turn reflects the requirements of Annex IV of the EIA Directive). Under reg. 11(2)(a) on receipt of an EIS, the EPA must consider whether it complies with art. 94 of the Planning and Development Regulations and whether the contents adequately identify, describe and assess the direct and indirect effects of the proposed development on the environment. If the EIS does not do this, the EPA has power under reg. 11(2)(b) by notice in writing to require the applicant to submit such further information as may be necessary to ensure compliance.

158. Finally, under regulation 13 the EPA has the general power to request the applicant for a licence to submit further information or evidence. If an applicant fails or refuses to comply with such request, the EPA may either proceed to consider the application in the absence of the requested information or inform the applicant that the application cannot be further considered (see reg. 13(4)(a) and (b)). However, this power is limited in that under reg. 13(3) the EPA may not make a second or further request of an applicant who has complied with an initial request for further information "*save as may be reasonably necessary to clarify matters dealt with in the … response*". In other words, the EPA may make a single request for further information under reg. 13 after which its power is limited to requesting information relating to the response received.

159. All of this is relevant because it would seem that the EPA's practice is to delay the formal acknowledgment of receipt of an application under reg. 10 in order to exercise the unrestricted right to seek further information under reg. 10 and 11. If an application is formally acknowledged as complete, then the EPA is restricted to a single opportunity to seek further information under reg. 13. Despite not acknowledging receipt of an application, the EPA continues to process it, as it did in this case, to the point where the inspector issues a report and makes a recommendation as to the decision the EPA should make. I note that many of the issues raised by the EPA in the case were prompted by submissions received from the public and other entities required to be notified of the application. Thus, requests for further information may in practise form part of a written procedure through which the EPA can ask a developer to specifically address concerns raised by other participants in the process. It would not be possible for the EPA to do this if receipt of the application had been formally acknowledged at the outset. Whilst this might seem to be an unequivocally sound practice, it does tend to suggest that the EPA licensing regulations are not fit for purpose in that they result in the EPA conducting the entire first stage of its licensing procedure which

includes extensive public consultation without having formally acknowledged receipt of a valid application. In this case the application for review of ICL's licence was before the EPA and substantively considered by it during a period of over three years without receipt of a valid application having been formally acknowledged. The legal consequences of this are addressed further below. Finally, I note that the 2013 licencing regulations were amended in 2020 by the EPA (Industrial Emissions) (Licensing) (Amendment) Regulations (SI 190/2020). These amendments are not material to the provisions under discussion.

160. The appellants argue that as ICL's EIS was not deemed to be complete until September 2019, a valid application for a licence had not been made at the point in time when the 2014 amendments took effect, i.e. 16th May 2017. Consequently, they argue that the project should have been assessed under the 2014 and not the 2011 EIA Directive. In support of this argument they rely on the text of the transitional provisions of Article 3 of the 2014 Directive. This provides as follows:-

> *"Article 3*
>
> *1. Projects in respect of which the determination referred to in Article 4(2) of Directive 2011/92/EU was initiated before 16 May 2017 shall be subject to the obligations referred to in Article 4 of Directive 2011/92/EU prior to its amendment by this Directive.*
>
> *2. Projects shall be subject to the obligations referred to in Article 3 and Articles 5 to 11 of Directive 2011/92/EU prior to its amendment by this Directive where, before 16 May 2017:*
>
> > *(a) the procedure regarding the opinion referred to in Article 5(2) of Directive 2011/92/EU was initiated; or*
> >
> > *(b) the information referred to in Article 5(1) of Directive 2011/92/EU was provided."*

161. The determination in Article 4(2) of the 2011 Directive referred to in paragraph 1 is a screening determination to decide whether a sub-threshold Annex II project should be made subject to the requirement for an EIA. The procedure and opinion referred to in Article 5(2) is what is termed a scoping exercise – i.e., a preliminary decision in the case of a project that does require EIA as to the information the developer is required to submit with its application which, in turn, will inform the scope of the EIA to be carried out. The information in Article 5(1) is the information required under Annex IV to be provided by the developer at the outset of the process and which constitutes the basic information on which the EIA will be conducted.

162. The appellants argue that as the information referred to in Article 5(1) had not been provided by ICL prior to 16th May 2017, the EIA for this project does not fall within Article 3(2)(b) and thus is governed by the 2014 and not the 2011 Directive. The respondent and the notice party argue that the narrow reading of Article 3(2)(b) which the appellants contend for is not consistent with Article 3 as a whole nor with the intended effect of that provision as evident from the recitals to the 2014 Directive. They rely in particular on recital 39 which provides as follows:-

> *"In accordance with the principles of legal certainty and proportionality and in order to ensure that the transition from the existing regime, laid down in Directive 2011/92/EU, to the new regime that will result from the amendments contained in this Directive is a smooth as possible, it is appropriate to lay down transitional measures. Those measures should ensure that the regulatory environment in relation to an environmental impact assessment is not altered, with regard to a particular developer, where any procedural steps have already been initiated under the existing regime and a development consent or other binding decision required in order to comply with the aims of this Directive has not yet been granted to the project.*

Accordingly, the related provisions of Directive 2011/92/EU prior to its amendment by this Directive should apply to projects for which the screening procedure has been initiated, the scoping procedure has been initiated, (where scoping was requested by the developer or required by the competent authority) or the environmental impact assessment report is submitted before the time-limit for transposition."

163. The respondent and notice party point out that if Article 3(2)(b) is to be read in the manner contended for by the appellants it would mean that an intending developer would ensure the application of the 2011 Directive merely by initiating either a screening or a scoping process to determine whether EIA is required and/or the scope of any EIA required before the cut-off date and without any application for development consent having been made much less an EIS being submitted prior to the cut-off date. At the same time, a developer who has actually made an application for development consent and submitted an EIS could lose the entitlement to be assessed under the 2011 directive by virtue of a determination made after the cut-off date that the EIS was not entirely complete at the time it was submitted. This, it is contended would not be consistent with the need for legal certainty and proportionality identified at recital 39, much less with the very clear intention that where any procedural step has been initiated under the 2011 Directive, the regulatory environment applicable to the application should not be altered even where development consent is not granted before the cut-off date.

164. The respondent and notice party rely on two cases, the decision of the CJEU in *Commission v. Germany* Case -C-431/92 and that of the High Court (MacGrath J.) in *M28 Steering Group v. An Bord Pleanála* [2019] IEHC 929. *Commission v. Germany* concerned circumstances in which informal contacts and meetings had taken place between the developer and decision maker before the first EIA Directive came into effect but the

application for development consent was not made until after the relevant date. The CJEU held (at para. 32 of its judgment):-

> *"Informal contacts and meetings between the competent authority and the developer, even relating to the content and proposal to lodge an application for consent for a project, cannot be treated for the purposes of applying the Directive as a definitive indication of the date on which the procedure was initiated. The date when the application for consent was formally lodged thus constitutes the sole criterion which may be used. Such a criterion accords with the principle of legal certainty as is designed to safeguard the effectiveness of the Directive."*

165. That case was perhaps more easily resolved than this one because the difference between not being the subject of any requirement for an EIA and being the subject of such a requirement is starker and easier to define than the question of which set of procedures should be applied for the conduct of an EIA where the form of the process is modified by amendments to the relevant directive. In fact, the transitional provisions in part create a distinction between informal contacts and meetings which might take place in respect of any application and formal preliminary steps taken under the unamended directive such as the initiation of a screening or scoping exercise. Therefore, whilst *Commission v. Germany* is interesting and its emphasis on the principle of legal certainty most likely informed the contents of recital 39, it is not determinative of this case.

166. *M28 Steering Group* is more directly in point as it concerns the transitional provisions of the 2014 EIA Directive in issue in this case. An application for development consent under the Roads Act, 1993 as amended had been made at the very latest point at which it could be made under the 2011 EIA Directive, namely on 15th May 2017. The applicants argued that because of inadequacies in the EIS the information required under Article 5 of the Directive had not been provided before the cut-off date and thus the 2014 Directive

applied. Whilst MacGrath J. was satisfied that the contended for errors and inadequacies in the EIS had not been established, he also regarded the transitional provisions in Article 3 and recital 39 of the 2014 Directive as supporting the Board's conclusion that the 2011 Directive applied. In circumstances where the EIS was submitted before the cut-off date he found it *"difficult to envisage circumstances in which it could be said that the process had not been at least initiated in accordance with the provisions of the Directive"* which approach he found to be consistent with *Commission v. Germany.*

167. The appellants argue that *M28 Steering Group* can be distinguished as the decision maker in that case had not made a formal finding that the EIS was inadequate, although that argument was made by the applicant on the judicial review. Here, the correspondence from the EPA dated 15th February and 3rd September 2019 is relied on as constituting a formal finding on the part of the EPA that the information required to constitute a valid EIS had not been submitted in May 2016 and was not submitted until September 2019.

168. In her written submissions Ms. Foley relied on the decision of Humphreys J. in *Clifford v An Bord Pleanála (No. 3)* [2022] IEHC 474 which held, *inter alia*, that if the law *"changes during the process prior to a decision, the new law should be applied as of the time of the decision, not as of the time of the original application"*. In coming to this conclusion Humphreys J. expressly disagreed with the earlier decision of McKechnie J. in *Kenny v An Bord Pleanála (No. 1)* [2001] 1 IR 565. Leaving aside the question of which of those judgments better reflects the law (and indeed whether the legal changes in the two cases are distinguishable), even in *Clifford* itself Humphreys J. identified a difficulty with the respondent's reliance on the principle of legal certainty to preclude the regulations becoming applicable after the process had already got underway due not least to *"the fact that the regulations do not say that"* (para. 58). In this case the issue does not fall to be determined by reference to general arguments as to the retrospectivity or non-retrospectivity of

procedural changes to a statutory process made whilst an application is underway but by reference to the terms of the transitional provisions which expressly envisage that such situation might occur.

169. In essence, the argument boils down to whether the court should construe this correspondence as a formal determination by the EPA that ICL had not submitted a valid EIS which determination, in turn, the court should either accept or by which the court is bound. The trial judge did not regard the deeming of the application to be fully complete in September 2019 as legally significant for the purposes of the 2014 Directive. He accepted the illogicality that the respondent and notice party contended would arise as a result if applicants who had merely initiated screening or scoping processes before the cut-off date were to be in a better position than applicants who had made an application and submitted an EIS. He noted the absence of any reference in Article 3 of the 2014 Directive to the competent authority having validated the application. Instead, the provision merely requires that the information be provided.

170. If the matter were to be determined on a purely factual basis all merit would undoubtedly lie on the notice party's side. Unlike *M28 Steering Group* the application and the EIS were submitted over a year in advance of the cut-off date. The EIS, when assessed by RPS, was found to be well structured and informed and to have systematically identified key environmental topics as required by the EIA Directive. The omissions were "*minor*". The EPA did not exercise the power it had under article 10(2)(b)(i) of the Licencing Regulations to advise ICL that a review of its licence could not be considered because of the deficiencies in its application and, in particular, in its EIS. Instead, it proceeded to conduct an extremely detailed assessment of the application – to a significant extent based on the EIS – and conducted extensive public consultations before it formally validated the application. The inspector's report issued the day after the date of formal validation. Therefore, both

the public consultation and the assessment of the application (which included both an EIA and an AA) were substantially completed at a time when the appellants contend the EIS did not comply with Article 5 of the 2011 EIA Directive.

171. Equally, I do not find this argument to be persuasive on a legal basis. The reference in Article 3(2)(b) of the 2014 EIA Directive is to the provision of the information referred to in Article 5(1) of the 2011 EIA Directive. Article 5(1) in turn refers to the information specified in Annex IV insofar as it is relevant to the circumstances of a particular project and the environmental features likely to be affected. Article 5(3) sets out the minimum level of information that a developer must submit under Article 5(1). This entails a description of the project, a description of the mitigation measures proposed, the data required to identify the main environmental effects, an outline of the alternatives studied by the developer and a non-technical summary of all of the information. Annex IV elaborates on these requirements particularly as regards aspects of the environment likely to be affected by the project and the description of the likely significant effects of the project. However, Annex IV is not prescriptive as regards the level of detail to be contained in a "*description*" which is the word used in most of its paragraphs to define what is required.

172. The question for the purposes of Article 3(2)(b) of the 2014 EIA Directive is not when the EPA validated either the application or the EIS but when the developer submitted an EIS which contained all of the information required by Annex IV. The appellants have not pointed to any heading in Annex IV under which the original EIS as submitted by the developer did not provide the required information. They rely exclusively on the terms of the EPA correspondence as establishing that the EIS was incomplete and invalid prior to 3rd September 2019 and complete and valid thereafter. The information actually requested on 15th February 2019 was not information the absence of which would have rendered the EIS as originally submitted non-compliant with Annex IV. Manifestly this could not be the case

where that information comprised information submitted to the planning authorities after the date the EIS had been submitted to the EPA and changes to the time scale of the project to accommodate the conditions of the planning permission granted more than two years after the EIS had been submitted to the EPA.

173. In my view it is possible both for a developer to have complied with Annex IV and, at the same time, for the decision maker to legitimately request further information from the developer. The mechanism for requesting such further information under national law may have led to the format of the correspondence in this case which is, admittedly, unhelpful. However, the correspondence itself does not establish a failure on the part of the developer to have complied with Article 5(1) and Annex IV of the 2011 Directive at the time it submitted its application in May 2016. The purpose of the transitional provisions in Article 3 of the 2014 EIA Directive is to ensure legal certainty. It would not be consistent with legal certainty to hold that an application and EIS submitted under the existing EIA regime a year in advance of the cut-off date for the commencement of the new regime could some three years later be deemed not to have met the minimum requirements of a valid application. This is all the more so when the application has in fact been assessed and that assessment has included extensive public consultation at a point in time when, by virtue of an allegedly deficient EIS, the application was allegedly not valid.

174. I reject the appellant's appeal and uphold the findings of the trial judge on this issue.

Fit and Proper Person Requirement

175. I have already outlined the statutory provisions regarding the determination as to whether someone is a fit and proper person to hold an industrial emissions licence at paras. 25-26 and 39 of this judgment. In brief, under s. 83(5)(a)(xi) the EPA shall not grant a licence or a revised licence for an activity unless satisfied, *inter alia*, that *"the applicant or*

the licensee or the transferee" is a fit and proper person to hold a licence. Section 84(4) sets out the circumstances in which a person is to be regarded as a fit and proper person. This subsection lists three requirements, two of which require the EPA to be of the opinion that an applicant will be able to meet them (*i.e.*, technical knowledge or qualifications and financial commitments or liabilities). The third, at s. 84(4)(a) is as follows: -

> *"(a) Neither that person nor any other relevant person has been convicted of an offence under this Act, the Act of 1996, the Local Government (Water Pollution) Acts, 1977 and 1990 or the Air Pollution Act, 1987 prescribed for the purposes of this subsection,"*

However, under s. 84(5) the EPA is given a discretion to disregard a conviction under s. 84(4)(a) in the following terms: -

> *"The Agency may, if it considers it proper to do so in any particular case, regard a person as a fit and proper person for the purposes of this Part notwithstanding that that person or any other relevant person is not a person to whom subsection (4)(a) applies."*

176. In order to put the arguments made under this heading in context it is also necessary to refer to three other sections. The first of these is the power of the EPA to attach conditions to a licence under s. 83(1) and s. 86. This power is broadly expressed under s. 83(1) and the detail provided at s. 86 is without prejudice to the generality of s. 83(1). Under s. 86(6) it is a criminal offence for a person to fail to comply with the conditions attached to a licence.

177. The second is the obligation on the EPA to provide reasons for its decision under s. 87(9A). The text of that provision has since been amended to take account of the changes required pursuant to the 2014 EIA Directive but at the material time it provided that, after it had made a decision, the EPA was to inform certain people including the public of the

decision and to make certain information available. The information to be made available included the decision itself, any EIA carried out in respect of it and also, at s. 87(9A)(iii): -

> *"(iii) having examined any submission or observation made to the Agency -*
>
> *(I) the main reasons and considerations on which the decision (including in the case of an application in respect of which an Environmental Impact Assessment is required under s. 83(2A), a decision to refuse an application) is based, and*
>
> *(II) the main reasons and considerations for the attachment of any conditions,*
>
> *including reasons and considerations arising from or related to submissions or observations made by a member of the public and, in respect of an application in respect of which an Environment Impact Assessment is required under s. 83(2)(a), a summary of the results of the consultations and the information gathered pursuant to s. 83(2A) and s. 85 together with a description of how these results have been incorporated into the decision or otherwise;*

178. Finally, under s. 97 the EPA has power to suspend or revoke a licence if it appears to the Agency under s. 97(1) that: -

> *"(a) the licencee no longer satisfies the requirements specified in s. 84(4) for his being regarded as a fit and proper person, and*
>
> *(b) the circumstances occasioning his no longer satisfying those requirements are, in the opinion of the Agency, of such seriousness as to warrant the revocation of the licence or the suspension of its operation."*

It is clear from this provision that revocation of a licence is not automatic in the event that a licensee is convicted of a breach of its conditions. In each case the EPA will have to form

an opinion as to whether the circumstances giving rise to the conviction are of such seriousness as to warrant revocation of the licence. In forming an opinion on this issue the EPA would no doubt have regard to a number of factors including the jurisdiction in which the convictions are recorded, the number of convictions, if there are multiple or past convictions the frequency of such convictions, the nature of the licence conditions which have been breached and the extent to which the breach of the licence has given rise to or is capable of giving rise to unacceptable environmental pollution. Obviously there may be other relevant factors depending on the circumstances of the case. Finally, the licensee has a statutory right to appeal to the High Court under s. 97(5) against any such decision.

179. It is undisputed that the licensee in this case, ICL, has a number of convictions for breach of the conditions of this licence, all of which are summary convictions on foot of guilty pleas before the District Court in Limerick. The chairperson of the oral hearing's report records three convictions, one in 2007 relating to dust emissions in October 2006 and two in 2018 relating to dust emissions on two separate dates in 2017. As I understand it the dust emissions in question were fugitive dust emissions emanating from the management of the activity on the site including the roads, quarry etc. rather than process emissions (i.e. from the licenced emission points). The charges specifically cited that the dust emissions *"resulted in an impairment of or an interference with amenities or the environment beyond the installation boundary"*. The fines imposed were generally at the lower end of the scale (€500 - €750) save on the last occasion in December 2018 when a fine of €4,000 was imposed.

180. This ground of appeal is advanced only by Ms. Foley. She does not contend that ICL is not a fit and proper person to hold a licence by virtue of these convictions. Rather, she contends that the EPA has failed to provide reasons for the exercise of its discretion under s. 84(5) to regard ICL as a fit and proper person notwithstanding the convictions. The licence

itself does not address the fit and proper person requirement and neither do the minutes of either meeting at which the EPA made its decisions (*i.e.*, to adopt the proposed determination and to issue the revised licence). Insofar as reasons are to be found in the Inspector's reports, Ms. Foley contends that these are uninformative and do not adequately explain the EPA's reasoning as regards s. 84(5).

181. Much of the case law on reasons in planning and environmental cases deals with the interaction of national law reasoning requirements with EU obligations under the EIA and Habitats Directives. I will be returning to these issues in due course. The court was informed that the fit and proper person requirement is a purely national law requirement which does not have its origin in the Industrial Emissions Directive or any of its precursor directives. Of course, it does not follow from this that there is no requirement for the EPA to have and to make available reasons for exercising its discretion in favour of ICL. However, it is neither helpful nor realistic to pitch the reasoning requirement on this issue at the same level as must be met, for example, to conclude beyond a reasonable scientific doubt the absence of any adverse effect on a European site in the face of apparently conflicting scientific evidence.

182. In dealing with this issue the trial judge initially emphasised the fact that the discretion given to the EPA under s. 84(5) is an untrammelled one or, as he characterised it an *"absolute discretion"*. He then looked at Humphreys J.'s summary of the conclusions to be drawn from a number of cases regarding the giving of reasons as set out in *Balscadden Road Residents Association Limited v An Bord Pleanála* [2020] IEHC 586. This summary is useful because it focuses on the obligation to give reasons *per se* rather than the heightened obligation which may arise where the impugned reasons relate to an EIA or an AA. He then focused on two of the matters identified in the *Balscadden* summary, namely that the extent of the reasons required depends on the context in which the decision was made and that their

adequacy should be assessed from the standpoint of an intelligent person who has taken part in the process.

183. The trial judge identified a number of factors as important as regards the context in which the decision was made. In terms of the background context, he identified the fact that the EPA had previously granted ICL an industrial emissions licence; that it had already granted co-incineration licences to all other cement plants in the country; the discretion given to the EPA under s. 84(5) and the fact that that discretion was very broad. He regarded the fact that the application was for a revised licence which, if refused, would result in the existing activity continuing on foot of the existing licence as an important element of the specific context in which the decision was made as was the fact that the EPA had not sought to exercise its power to revoke the existing licence on the grounds of the same three convictions. Consequently, he felt that the change to the activity (*i.e.*, the introduction of co-incineration of non-hazardous waste) would have to be such that it would justify a conclusion that ICL was not a fit and proper person to operate the revised licence while remaining a fit and proper person to operate the existing licence. In circumstances where the decision, in effect, was to continue to regard ICL as a fit and proper person to hold a licence, there was no necessity that reasons be given as to why it should still be so regarded as this would be evident to an intelligent person who had participated in the process. Finally, he accepted the EPA's argument that insofar as the conditions of the revised licence expressly dealt with dust emissions, which were the subject of the convictions, they circumscribed the licenced activity and constituted reasons for the EPA's decision to regard ICL as a fit and proper person.

184. In dealing with this issue, it may be useful to state at the outset that I do not agree with the statement at para. 246 of the trial judge's judgment that there was no necessity for reasons to be given as to why ICL should still be regarded as a fit and proper person by the EPA.

The fact that ICL is an existing licence holder and would remain a licence holder if the revisions were refused is undoubtedly a relevant factor which goes to the extent of the reasons required but not to the existence of a reasoning requirement. Once ICL was convicted of a prescribed criminal offence, as it was, then in order to be satisfied of all of the matters of which it is required to be satisfied under s. 83(5), the EPA had expressly to consider the exercise of its discretion under s. 84(5). Once objectors put ICL's criminal convictions in issue as regards its fitness to hold a licence, then reasons for the EPA's regarding ICL as a fit and proper person had to exist and had to be capable of ascertainment.

185. Further, it is clear from the judgment of the Supreme Court in *Mallak v Minister for Justice* [2012] 3 IR 297 that the fact a discretion is an absolute one does not absolve the decision maker from the need to have a reason to exercise it. The absence of any requirement to have a reason for the exercise of such a discretion would mean that it could be exercised arbitrarily or capriciously. Fennelly J. linked the need for a decision maker to provide the reasons for its decision with the ability of the Superior Courts to effectively review such decisions. Nonetheless, where a discretion is conferred by statute in absolute terms I think the reasoning obligation is correspondingly weaker as the decision maker is merely explaining the rationale for the decision rather than justifying its adoption by reference to a multiplicity of statutory factors.

186. That said, I endorse the balance of the trial judge's comments as to the context in which reasons must be provided for regarding ICL as a fit person. Under statute the reasoning obligation on the EPA extends to the *"main reasons and considerations"* for its decision and for the attachment of conditions to any licence granted. It is evident from both s. 87(9A) and the list of things to which the EPA must have regard in making its decision under s. 83, that the main reasons and considerations for its decision will primarily be scientific and technical in nature. Those reasons will focus on the key issue of whether, if licenced and

subject to conditions, the activity will give rise to unacceptable environmental pollution. The question of whether the applicant for a licence is a fit and proper person, albeit important in its own way, is almost never going to be a main reason for a decision to grant a licence, although it may be for a decision to refuse it. The additional factor that ICL was an existing license holder and would continue to be a licensee if the application for revisions were refused, would no doubt move the fit and proper person requirement even further from being a main reason or consideration in this case.

187. Thus, the reasoning obligation as regards being a fit and proper person was in this case a light, if not a very light, one. It is evident from the inspector's and the chairman's reports that the issue was expressly considered by them and that they each concluded that ICL should, notwithstanding the prior convictions, be regarded as a fit and proper person. The inspector, having set out the July 2018 conviction and the fines imposed simply concluded that in his view ICL could be deemed a fit and proper person for the purposes of the review. Although not expressly stated by him, it would seem implicit that his view was that the convictions of that type and/or that magnitude did not warrant the refusal of the requested review of an existing licence. Of significance, at section 4 of his report, the inspector noted that the dust emissions which gave rise to the prosecution "*related to road maintenance, material handling and storage piles on the site rather than to the point sources emissions concerned in the application assessment*". He also noted conditions 5 and 6 of the recommended decision which he described as providing for rigorous control of dust in and around the installation.

188. The chairperson of the oral hearing deals with the requirement at section 2.8.2 of his report. He notes that the issue was raised by counsel on behalf of, *inter alia*, Ms. Foley who cited a number of problems and not just the convictions (although only the convictions are

relevant to the statutory fit and proper person requirement). He then set out details of the three prosecutions and stated:-

> *"It is considered that the prosecutions taken against ICL under the EPA Act 1992, as amended, for breaches of its licence conditions are serious. However, the Agency has considered that ICL are a fit and proper person notwithstanding that ICL has been convicted of offences under the EPA Act, 1992 as amended.*
>
> *I consider having regard to the provisions of s. 84(5) of the EPA Act, 1992, as amended, and the conditions of the PD and recommendations of this report, that ICL can be deemed as a fit and proper person for the purposes of this licence review."*

189. The question then is whether the reasons which can be extracted from these reports satisfy the obligation on the EPA to have a reason for the exercise of its discretion under s.84(5).

190. Contrary to the argument made in Ms. Foley's written submissions the standard of reasoning required under administrative law is not uniform. It can and does vary depending on the nature of the decision and the context in which it falls to be made. Further, the requirement to provide reasons does not necessarily require reasons to be stated for every constituent element of a decision. This is clear from the terms of s.87(9A) itself which only requires main reasons and considerations to be stated. It has also been confirmed by CJEU in the context of the heightened obligation to give reasons for appropriate assessment conclusions that a decision maker is not obliged "*to respond, in the statement of reasons for its decision, to all points of law and fact raised during the administrative procedure*" (see *Eco Advocacy* case C-721/21 above).

191. Further, the reasons do not have to be stated in the decision itself. The obligation under s.87(9A) is to make information relating to the main reasons and considerations for the decision available. The jurisprudence of the Supreme Court including, in particular *Connolly*

v. An Bord Pleanála (a case to which I shall return), makes it clear that the reasons for a decision can be found in materials such as an inspector's report created as part of the process leading to the decision.

192. In this case the inspector and the chairperson's reports suggest three reasons for the EPA's decision to consider that ICL was a fit and proper person notwithstanding the prior convictions. These are the nature of the convictions, the fact that the EPA considered ICL to be a fit and proper person to continue to hold the existing licence notwithstanding the convictions and the conditions attached to the licence.

193. Whilst the chairperson acknowledges that the prosecutions were "serious", it is clear from the inspector's report that they emanated from materials handling rather than the core licenced activity and did not involve what are termed "*point source emissions*". They were also summary convictions on foot of guilty pleas before the District Court rather than cases which were felt sufficiently serious to prosecute on indictment before the Circuit Court. In this regard it is relevant that conviction of a criminal offence does not automatically result in the revocation of a licence under s.97 nor indeed automatically result in a person not being regarded as a fit and proper person to hold a licence under s.84(4). The section is framed in terms which mean that a person without convictions is automatically fit and proper but does not expressly stipulate the converse, i.e. that a person with convictions is not fit and proper. Although not expressly stated, I think it should have been clear to any person involved in the process that the inspector and the chairperson did not regard the convictions in this case as being sufficiently serious to warrant refusal of the requested revisions.

194. I do not accept Ms. Foley's assertion that the non-invocation by the EPA of the power to revoke ICL's existing licence under s.97 is irrelevant to the exercise of its discretion under s.84(5). It is only where the seriousness of the circumstances giving rise to a conviction warrant its revocation that the EPA may commence the process leading to revocation. Both

the existing licence and the requested revisions serve to authorise ICL to operate a cement manufacturing plant at Castlemungret. If the convictions were not sufficiently serious as to warrant revocation of the existing licence, it is difficult to understand how they could simultaneously be such as to prevent ICL being a fit and proper person for the purposes of holding the revised licence. Whilst there are differences between the licences, and I accept that the incineration of waste is an important difference, they essentially relate to the carrying on of the same activity at the same location. Consequently, I accept the logic in the trial judge's view that the revisions to the licence would have to entail a change of such materiality that ICL could reasonably be regarded as a fit and proper person to continue to hold the existing licence whilst not being fit for the purposes of its revision.

195. I regard the chairperson's statement that the EPA had already considered ICL to be a fit and proper person notwithstanding the convictions to be a key indicator of the reasons of this element of the decision. The reason could have been conveyed more clearly but I think that it should be apparent to an intelligent person who had participated in the process that the EPA was, consciously, not altering its view that the convictions in question did not make ICL unfit to hold a licence.

196. Finally, I do not accept Ms. Foley's contention that the fit and proper person requirement under s.84(4) and (5) is entirely unrelated to the EPA's power to impose conditions on a licence under s.83(1) and s.86. This argument is based on the fact that the former entails personal consideration of the applicant for the licence whereas the latter involves impersonal consideration of how the activity should be operated. This is correct in large part but overlooks the key fact that the fitness requirement under s.84(4) is not an abstract one but is directly related to the licence for which the applicant has applied. This is perhaps clearest from sub-paras. (b) and (c) of s.84(4). These deal with an applicant's fitness in terms of technical knowledge and qualifications to carry on the activity in accordance with

the licence and the applicant's ability to meet financial commitments or liabilities that will be entered into or incurred in carrying on the licenced activity and on its cessation. Therefore, the scope of the activity and the terms on which the licence authorises the carrying on of the activity through the imposition of conditions are directly relevant to an applicant's ability to meet the requirements of s.84(4). Whilst neither s.84(4)(a) nor s.84(5) expressly reference the activity in the context of an applicant's convictions, in my view the scope of the activity and the terms upon which it is licenced may be relevant factors for the EPA to take into account under s.87(1)(b) when considering the circumstances giving rise to a conviction and whether they are such sufficient seriousness as to warrant revocation of the licence.

197. However, I am not convinced I would regard this element alone as constituting a reason or an adequate reason for the exercise of the EPA's discretion under s.84(5) in this case. The EPA relied on the fact that the conditions of the licence and in particular conditions 5 and 6 which deal with emissions, control and monitoring impose tight controls on the licensed activity which should assist in the prevention of future breaches of the licence by the licensee. However, the EPA was unable to identify to the court any material change between these conditions as attached to the revised licence and those attached to the original licence which were, admittedly, breached by the licensee. ICL point to a number of differences in the conditions relating to dust (particulate matter) that may be emitted at the licenced emissions points including a reduction in the relevant ELV and an increase in the frequency and type of monitoring. However, it does not seem that this type of dust emission was involved in the convictions. In those circumstances it is difficult to understand how the attachment of these conditions to the licence could offer a rational explanation as to why the EPA regarded ICL as a fit and proper person to hold the licence.

198. In conclusion on this issue, I am of the view that the treatment of the fit and proper person requirement in the inspector's and the chairperson's reports provides, just about,

sufficient reasons for the exercise of the EPA's discretion under s.84(5). The reasoning obligation on the EPA on this issue was relatively light and it was clearly an overriding consideration that the EPA had not treated the same convictions as sufficient to justify revocation of the existing licence which ICL would continue to hold if the application for its review were refused. Whilst by no means optimum, it should have been apparent to those involved in the process that in accepting the recommendation of its inspector and the chairperson of the oral hearing the EPA did not regard the convictions as being sufficiently serious to prevent ICL being a fit and proper person. This was particularly so in circumstances where the EPA had not invoked the power it had under s.84(5) to revoke a licence when the licensee ceases to comply with the "*no convictions*" element of the fit and proper person requirement under s.84(4). It might have been preferable for the EPA to have expressly averted to the issue, especially since it was one raised and pursued by the objectors, in the minutes of the meetings at which it took the decisions to issue the proposed determination and the licence or in the statement of reasons contained in the licence itself. Nonetheless, the EPA had a broad discretion under s.84(5) and could reasonably have come to the view that ICL should be treated as a fit and proper person on the basis discussed in the inspector and chairpersons' reports.

199. Finally, I should note that if I am wrong in the above conclusion, it would not necessarily follow that the decision should be quashed. It is a pre-condition to the exercise of its jurisdiction to grant a licence under s.83 that the EPA be satisfied that the applicant for the licence is a fit and proper person. This requirement was clearly adverted to and addressed in the course of the process leading to the grant of the revised licence in this case. Both the inspector and the chairperson, whose recommendations were accepted by the EPA, clearly and expressly concluded that ICL should be regarded as a fit and proper person notwithstanding the convictions. Therefore, any want of an explicit statement of reasons on

this point does not go to the jurisdiction of the EPA to grant the revised licence and, at its height, the only benefit this appellant would obtain from a finding in her favour on this ground would be the remittal of the decision to the EPA for the purposes of providing reasons for this discrete element of it. Given the very detailed nature of the process which has already taken place and the fact that the issue was expressly addressed and decided, I do not think that such a step would be warranted. Consequently, even if this legal ground of challenge had been made out I would not be prepared to grant an order of *certiorari* on foot of it.

Appropriate Assessment - Output and Reasons

200. The following sections of this judgment will deal with a number of challenges made by the appellants regarding the EPA's treatment of the scientific evidence, especially in the context of its conclusions in the AA that there would be no adverse effect on the integrity of any European site. It may be useful to start my consideration of these issues by addressing an argument made on behalf of Ms. Foley to the effect that the EPA failed to provide adequate reasons capable of dispelling all scientific doubt for its AA conclusions in light of the expert scientific evidence submitted on her behalf. The scientific expert in question is Dr. Shanahan, an environmental consultant with a PhD in atmospheric chemistry who gave written and oral evidence in the course of the process and who has sworn an affidavit for the purposes of the proceedings largely reiterating that evidence and taking issue with the contents of the expert affidavits sworn on behalf of ICL.

201. Earlier in this judgment I have referred to the requirements for a valid appropriate assessment as set out in judgments of the CJEU such as *Waddenzee, Commission v Spain* and *Sweetman v An Bord Pleanála* and, in this jurisdiction, in *Kelly v An Bord Pleanála*. To reiterate, in order for an AA to reach a valid conclusion that there will be no adverse effect on the integrity of an EU site, the assessment must identify and describe all aspects of the

development which may affect a European site, it must contain complete, precise and definitive scientific findings and conclusions and not have any gaps or lacunae. Those scientific findings must be capable of supporting the conclusion that no reasonable scientific doubt remains as to the absence of any adverse effect on the integrity of the sites. The potential for such effect will usually have been identified in the course of a preliminary screening exercise.

202. Added to these requirements, a number of cases in this area have identified the need for the decision maker to reach conclusions on the submissions made to it and for the statement of reasons for the decision to enable those who made submissions to understand why those conclusions had been reached. This was put as follows by O'Donnell J. in *Balz v An Bord Pleanála* [2020] 1 ILRM 367 at p. 388: -

> *"It is a basic element of any decision making affecting the public that relevant submissions should be addressed and an explanation given that why they are not accepted, if indeed that is the case. This is fundamental not just to the law, but also to the trust which members of the public are required to have in decision making institutions if the individuals concerned, and the public more generally, are to be expected to accept decisions with which, in some cases, they may profoundly disagree, and with whose consequences they may have to live."*

203. It has recently been clarified by the CJEU that a decision maker is not necessarily required to address each submission made to it in its statement of reasons. In the case in question, *Eco Advocacy v An Bord Pleanála* Case C-721/21, the decision maker had concluded that an appropriate assessment would not be required before granting consent for a large-scale housing development in the vicinity of an EU site. In a subsequent judicial review, the objector complained that inadequate reasons had been provided for this conclusion and the rejection of ecological concerns expressed to the decision maker in the

course of the process. I have already referred to this judgment insofar as it deals with the need for the case relied on by an applicant in judicial review proceedings to be specifically pleaded. On the question of the standard of reasoning, the court identified the question before it as follows: -

> *"31. By its fifth question, which it is appropriate to examine before the fourth question, the referring court asked, in essence, whether Article 6(3) of Directive 92/43 must be interpreted as meaning that, where a competent authority of a Member State decides that an appropriate assessment is not necessary, it is obliged to state, in an explicit and detailed manner, the reasons on which it bases its decision, so as to dispel all reasonable scientific doubt concerning the effect of the proposed plan or project for the site concerned and to remove expressly and individually each of the doubts raised in that regard during the public participation process."*

In answering that question the court stated: -

> *"40. Such a requirement entails that the competent authority should be in a position, following an appropriate assessment, to state to the requisite legal standard the reasons why it was able, prior to the granting of the authorisation at issue, to achieve certainty, notwithstanding any opinions to the contrary expressed, that there was no reasonable scientific doubt with respect to the environmental impact of the work envisaged on the site concerned (see to that effect, judgment of 7 November 2018, Holohan & Ors., C0461/17 paragraph 51)*
>
> *42. It follows that, although where a competent authority decides to authorise such a project without requiring an appropriate assessment within the meaning of that provision, EU law does not require that authority to respond, in the statement of reasons for such a decision, one by one, to all the points of law and fact raised by the interested parties during the administrative procedure, the said authority must*

nonetheless state to the requisite standard the reasons why it was able, prior to the granting of such authorisation, to achieve certainty, notwithstanding any opinions to the contrary and any reasonable doubts expressed herein, that there was no reasonable scientific doubt as to the possibility that the project would significantly affect the site."

204. The argument made by counsel on behalf of Ms. Foley on the hearing of the appeal was couched in terms of posing a rhetorical question asking where, amidst the voluminous documentation generated during the process, the appropriate assessment was to be found. He argued that it could not be in the licence itself as, although the licence contained conclusions on the AA and a brief statement of reasons for it, it did not identify or describe the potential effects of the development on any European site and it did not make detailed findings as to the likelihood of an impact arising from those effects. It also did not address Dr Shanahan's evidence. He argued that the EPA could not rely on the chairperson's report as constituting the appropriate assessment because it did not identify and describe all of the potential effects of the development on any European site. Equally, the EPA could not rely on the inspector's report which did systematically identify the potential effects on each of the qualifying interests for the protected sites as that did not deal with the scientific issues raised by Dr. Shanahan in the evidence she gave to the oral hearing which necessarily post-dated the inspector's report. He argued that Dr. Shanahan's evidence raised scientific controversies which, if the evidence was to be rejected, the EPA had to provide an explicit and detailed statement of reasons for doing so.

205. He relied in this context on the decision of the CJEU in *Holohan v An Bord Pleanála* Case C-461/17 and in particular the following paragraphs discussing the nature of the conclusions required before an assessment can be considered to be appropriate within the meaning of the Habitats Directive: -

"51. In circumstances such as those in the main proceedings, that requirement entails that the competent authority should be in a position to state to the requisite legal standard the reasons why it was able, prior to the granting of development consent, to achieve certainty, notwithstanding the opinion of its inspector asking that it obtain additional information, that there is no reasonable scientific doubt with respect to the environmental impact of the work envisaged on the site concerned.

52. In light of the foregoing, the answer to the ninth, tenth and eleventh questions is that Article 6(3) of the Habitats Directive must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons, capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned."

206. Counsel for the EPA suggested that this judgment could be distinguished as it dealt with a situation where the decision maker rejected the expert view of its own inspector rather than expert evidence adduced by a party to the process. I do not think that this distinction is valid. It may be that there is a heightened obligation on the decision maker to provide an explicit statement of the reasons for rejecting the views of an expert which it has tasked with assessing and summarising all of the evidence before it on an independent or neutral basis and making recommendations as to how it should proceed. Nonetheless where expert evidence material to the issues is adduced by any party, that evidence must be considered by the decision maker and, if the evidence is not accepted, it must be apparent from its reasoning process why that was the case.

207. That said, it is important to bear in mind an appropriate assessment is a process. The process leads to conclusions but during the process issues may be raised, responded to and

dealt with by or on behalf of the decision maker in a way which means that a concern expressed at an earlier stage in the process may no longer be live at the point where the conclusion is reached. I will deal with specific aspects of the assessment which are the subject of challenge in the following sections of this judgment. However, at this point it is useful to appreciate that certain of the issues raised by the appellants and their experts during the course of the process were in fact engaged with by the EPA which requested further information from ICL expressly addressing those issues, including the reconsideration of various parts of ICL's scientific analysis. These included, for example, the appropriate figure for the deposition velocity of nitrogen to be used in calculating the ground level concentration of nitrates and the background levels of hexavalent chromium which should be assumed for the purposes of a similar analysis.

208. At the more general level, the argument made was to the effect that it could not be readily identified where the AA was to be found and a complaint was made that the appellants, as members of the public, could not be expected to piece it together from a number of different documents. This is in fact the same argument that was accepted by the High Court in *Connelly v An Bord Pleanála* but overturned by the Supreme Court on appeal [2021] 2 IR 752.

209. In examining the question in *Connelly,* Clarke CJ referred to two of his own earlier judgments in which he had dealt with the issue of the extent to which reasons for a decision can be found in a document external to the decision itself. In *Christian v Dublin City Council* [2012] 2 IR 508 he held as a matter of principle that reasons for a decision could be recorded in a different document. However, he qualified this by stating *"the requirement of reasonable certainty as to the reasons seems… to necessitate that any documentation said to represent the reasons must be either expressly referred to [in the decision] or be, by necessary implication from the terms [of the decision] clearly adopted…"*

210. In a slightly later decision, *EMI Records v Data Protection Commissioner* [2014] 1 ILRM 225 he elaborated on this requirement from the perspective of those affected by the decision: -

> *"Where, however, it is suggested that the reasons can be found in materials outside both of the decision itself together with materials expressly referred to in the decision, then care needs to be taken to ensure that any person affected by the decision in question can readily determine what the reasons are notwithstanding the fact that those reasons do not appear in the decision itself or in materials expressly referred to in the decision.*

He emphasised in *Connolly* that for the reasons for a decision to be adequate, if they are not included in the text of the decision itself *"they must be capable of being readily determined by any person affected by the decision"*.

211. Clarke CJ then proceeded to apply that analysis specifically to the requirement for reasons for an appropriate assessment in a case, such as this, where the application is complex and involves detailed scientific argument and calculation. In such a context he felt that the reasonable observer would undoubtedly look to the inspector's report, to the decision maker's request for further information based on concerns expressed in that report, to the further information which the developer submitted in response and to the rationale expressed in the decision as to why the initial reservations had been met. This, in my view, is consistent with the comments I have made above to the effect that where a court is asked to examine a complaint as to the adequacy of reasons for an appropriate assessment, it is important to bear in mind that the assessment is a process and to have regard to how issues have been dealt with by the decision maker in the course of that process.

212. Clarke CJ also held that the inspector's report did not become irrelevant simply because it predated the request for further information and the response thereto. (On the

facts of *Connelly,* the decision maker did not revert to its inspector after receipt of the requested further information). Even though the process had moved on, the report remained relevant to the decision maker's reasoning. Finally, Clarke CJ regarded it as important that all of the documentation in question was accessible to the public. This of course is also the case here as the all of the documents to which I refer in this judgment were and indeed remain available on the EPA's website.

213. Turning to the facts of this case, I have outlined earlier how the EPA's bifurcated licencing process is unusual compared to similar statutory schemes in Ireland. Importantly, a decision to issue a proposed determination made at the end of the first stage is and must be capable of constituting the EPA's final decision if no objection is made to it. Therefore, the EPA is obliged to conduct a full EIA and AA, where those assessments are required, before issuing a proposed determination. In this case the inspector did conduct an appropriate assessment. The contents of that assessment are recorded in a narrative or discursive form at section 15 of his report and in tabular form at Appendix 1 to the report. The table identifies every EU site potentially affected, the pathway through which such effect might materialise and both the potential impact and the predicted impact, if any, on every protected habitat or species for which the site is designated.

214. Because objections were received to the proposed determination, the EPA continued its decision-making process into the second stage. In his report of the oral hearing the chairperson identifies the submissions received from third parties to the effect that the NIS was inadequate and that the AA as reflected in the inspector's report did not meet the requirements of European law. He identifies a number of specific issues which were raised in this regard and goes on to deal with these arguments. He also addresses the ecological issues in a number of other sections of his report as, for example, assessment of the effect of the emission of various pollutants on adjacent EU sites was very much linked to the accuracy

and completeness of the air dispersion modelling carried out by ICL. When looking at air emissions and health he refers expressly to Dr. Shanahan's evidence, to the response to that evidence given by ICL's expert, Ms. Whyte and to the engagement on these issues had before the oral hearing. In all some 24 pages of his report are devoted to a discussion and analysis of air emissions – which are relevant to AA because they were accepted as a pathway through which pollutants emitted from the activity might reach the protected sites.

215. Finally, the licence itself records the EPA's reasons for the decision to grant it. Significantly, the licence formally adopts the inspector's report and the report of the chairperson of the oral hearing as a fair and reasonable examination, evaluation and analysis of the likely effects of the activity on the environment. Thus, this is not a case in which the court is required to infer that reasons for the decision are to be found in material which is not expressly incorporated into the decision itself.

216. As regards appropriate assessment, the licence records the initial screening decision and the reasons for it including a list of the EU sites potentially affected by the licenced activity. It then formally records the EPA's completion of the appropriate assessment and that it was certain, based on the best scientific knowledge, as to the absence of adverse effects on the integrity of any of the listed EU sites having regard to their conservation objectives. The licence then lists a number of additional reasons for this conclusion. Some of these reasons are based on specific conditions attached to the licence addressing those aspects of the activity regarded as potential pathways for the transmission of pollutants to the EU sites identified at the earlier screening stage. The reasons include a statement that air dispersion modelling was assessed as part of the licence review and the conclusion reached that there would not be a significant impact on air quality as a result of the activity.

217. In light of the terms of the licence itself and its express adoption of the inspector's report and the report of the chairperson of the oral hearing, I am satisfied that the EPA's

appropriate assessment is to be found in a combination of the licence and these reports read together. Finally, it might be worth observing the significant output of the EPA in respect of this process. The inspector's report runs to 117 pages. The report of the chairperson of the oral hearing runs to a further 250 pages, of which 131 pages comprise his analysis of the evidence. The remainder comprises a report on the evidence given at the oral hearing and various appendices. The licence itself, including the reasons for granting it, runs to some 46 pages. In all, this amounts to some 413 pages of recording, describing, analysing, concluding and deciding. Whilst it is of course always possible that notwithstanding such a detailed and involved decision making process, the EPA may have made errors, a generic complaint of an inadequacy of reasoning or an inability to ascertain where the appropriate assessment is to be found seems to me unwarranted.

Air Emissions – Doctor Shanahan's Evidence

218. A more detailed argument was made on behalf of Ms. Foley based on Dr. Shanahan's evidence and the alleged failure of the EPA to deal with that evidence in a manner which eliminated all reasonable scientific doubt in respect of the issues with which it was concerned. There were three strands to this argument, all of which related to the modelling methodology used by ICL's expert to predict the potential emissions through air of various pollutants from the licensed activity.

219. Modelling is a complex scientific exercise in which, using software expressly designed for the purpose, calculations are made relating to the potential emission of different pollutants from an activity. The impact of the proposed changes to the activity is assessed by comparing the existing situation, in particular existing predicted ground level concentrations (GLC) of pollutants emitted from the existing activity, with those from the proposed scenario in the event the licence to be revised. These are then assessed for

compliance with relevant standards set by various bodies at either a national or international level (i.e. by the EU or WHO) for the protection of the environment generally or for the protection of human health or, as was the case here in relation to certain pollutants, the protection of vegetation. The outcome of the exercise may vary depending on the parameters used and much of the argument asserted that incorrect parameters had been used, that the modelling exercise should have been completely rerun using different parameters and that the contents of the NIS were not revisited in light of changes made when different parameters were used.

220. The purpose of the modelling exercise in this case was to ensure that any pollutants emitted from the activity will not exceed relevant air quality standards (AQS) set by law at EU level under Directive 2008/50/EC and in national law by the Air Quality Standards Regulation 2011 (SI 180/2011). Where air quality standards have not been set in respect of a particular substance guidelines issued by various other authorities including the WHO or bodies comparable to the EPA in other jurisdictions, such as the UK's Environmental Agency (EA) are used instead. By way of context to the discussion which follows, it should be noted that with one exception (discussed under the heading hexavalent chromium) all of the modelling showed regardless of the parameters used that emissions of substances under both the terms of the existing licence and the revisions sought were well below the permitted levels set in the AQS and any guideline standard. The modelling also showed that there would be a reduction in the emission of virtually all pollutants under the revised licence.

221. It is also useful to understand that a modelling exercise is – and in this case was - conducted to represent a "worst case scenario". In essence, the figures used assume that the activity will operate at the maximum permitted rate on a non-stop basis emitting the maximum level of each pollutant permitted. In the course of monitoring exercises, measurements are taken at the point in time and place when the concentrations of pollutants

are likely to be at their highest. The worst meteorological conditions for the purposes of the dispersal of pollutants are assumed. In reality, for various reasons including in this case the fact that the licence limits the amount of waste that can be received annually at the site for the purposes of co-incineration, this worst-case scenario is highly unlikely ever to materialise. Further, for the purpose of establishing the existing scenario measurements were taken within the site boundary where concentration of pollutants are likely to be at their highest as concentration decrease as emissions disperse from the emission point. The NIS explains that for the purposes of its analysis the "site" was taken to be the smaller area within the licenced site where the cement plant is located and which was the subject of the application for planning permission. This meant that ICL could and did take measurements and model potential effects for locations some distance away from the cement plant but still within the boundary of the licenced site.

222. The arguments and the evidence on which they are based are very technical and the following is probably a very simplified account of them.

223. The first complaint is that the air quality assessment submitted by ICL initially as part of the EIS in 2016 and subsequently as an appendix to the NIS in December 2018 used the "wrong" figure for the assumed deposition velocity for nitrogen. Although the EPA requested ICL to recalculate the impacts using the "correct" figure in 2019, the NIS was not revised in light of the resulting changes. Secondly, it is contended that the modelling exercise did not accurately reflect the "worst case scenario" focusing specifically on sulphur dioxide. In essence it was contended that the modelling exercise looked at emission limit values, i.e. the maximum amount of each pollutant which ICL is permitted to emit in each cubic meter of gas emitted. However, the absolute amount of the pollutant emitted depends not only on the amount of the substance permitted in each cubic meter but on the volume of cubic metres the activity is permitted to emit as a whole. This is described as the mass

emission rate. The revised licence permits an increased in volumetric gas flows from three emission points and it is contended that the resulting increase in the mass emission of various pollutants, including sulphur dioxide, had not been properly assessed.

224. The third element of the complaint arises from the fact that during the course of the process (in late 2018) the EPA proposed to change the emission points originally submitted by closing one (coal mill 6) and ducting its emissions through another (kiln 6). The licence allows a period of six months for the work necessary to effect this change to be carried out. It is contended that the first and earliest version of the air quality assessment (2016) was based on both of these emission points being in operation but used lower volumetric gas flow rates than those now permitted by the revised licence. Therefore it did not properly model the mass emissions. The second 2018 version of the assessment used the revised (and higher) volumetric gas flows but was based on relevant emissions only through kiln 6. The later version of the assessment (2019) was also based on only kiln 6 being in operation and used higher volumetric gas flow rates. In essence it is contended that no assessment has been carried out of both emission points being in operation simultaneously under the revised licence using the higher gas flow rates.

225. Even from this simplistic overview, the highly technical and complex nature of the evidence involved can be appreciated. Notwithstanding the fact that the arguments ultimately bear on the appropriate assessment conducted by the EPA, in my view this is the type of situation in which considerable deference must be afforded by the court to the expertise of the decision maker. This is not a knee jerk reaction with a view to limiting the scope of the review open to the court or to avoid a consideration of the evidence that was before the EPA. Rather it is an acknowledgment that the court is not in a position to readily evaluate that evidence or to form a view as to whether complaints made about discrete elements of a very complex and technical analysis are valid. Further, it is clear from the

documentation as a whole that the EPA engaged with the assessment of atmospheric emissions in considerable detail during the course of the process. For example, in a request for further information dated 1st November 2018 the EPA requested further details in 11 separate queries under the heading "Emissions to Atmosphere" and again on 29th May 2019 ten separate points were raised by the EPA under this heading. Revisions were requested from ICL to deal with different aspects of the analysis including the potential impact of various emissions on ecologically sensitive sites. I have already referred to the extent to which the chairperson of the oral hearing addressed these issues and Dr. Shanahan's evidence in his report.

226. In those circumstances the court should be very slow to assume that the expert decision maker has failed to appreciate and to deal properly with the significance of the points made by Dr. Shanahan in her evidence. Indeed, it is apparent that much of what Dr. Shanahan said was taken on board by the EPA. For example, ICL had originally requested a derogation from the permitted BAT ELV level of 50mg/Nm³ for SO_2 to the level of 400mg/Nm3 which was permitted under the licence as revised in 2017 (a permissible derogation under the CID). Dr. Shanahan argued strongly against this as a result of which ICL did not pursue the request and the licence restricts the ELV for SO_2 to the BAT 50mg/Nm³ .

227. I will now turn to the discrete arguments made by Ms. Foley under this heading most of which contend that the modelling methodology used by Arup in their various reports was incorrect.

228. Firstly, it is contended that the original air quality assessments carried out used an incorrect figure for the deposition velocity of nitrogen. Even though the EPA asked for the assessment to be revised using what Dr. Shanahan accepts is the correct figure, it is contended that this was insufficient as the entire modelling exercise was not carried out

again. I accept that nitrates are known to be a problematic pollutant in terms of plant life and health. It appears they promote growth in some species which can have a detrimental effect on other species in the vicinity with consequential impacts on animal and bird species dependent on any plants or species which may be negatively affected. Consequently, the likely ground level concentration (GLC) of nitrates in the adjacent EU sites was an important element of the appropriate assessment.

229. The purpose of the modelling exercise carried out in 2016 was to model the dispersion to the atmosphere of gases emitted from the activity and to predict and compare the resulting ground level concentration of certain pollutants over various time periods by reference to permitted ELVs under the then-existing licence conditions and the more stringent ELVs outlined in the CID BAT conclusion (which had not yet been implemented at the time of the 2016 EIS but which ICL reasonably assumed would be applied by the EPA) and to assess these by reference to applicable air quality and other standards. The exercise is an extremely complex one in which a range of different information is relevant and fed into a computer model. These include factors such as metrological conditions, the location of various receptors, the location of neighbouring buildings, emission sources, the conversion rate of NO_x to NO_2 (itself a complex calculation) and existing EPA air quality monitoring carried out under SI 180/2011 for the relevant zone in which the installation was located.

230. At the outset I should state that I deprecate the language used to describe the original assessments on behalf of Ms. Foley. The assertion is that they were flawed, that one of the rates used was wrong and that the results are incorrect. When taken out of the context of what actually occurred, this might suggest that the expert relied on by ICL to carry out this work simply did not know what they were doing. When the documents were fully examined it was clear that this was not the case.

231. Air modelling was initially carried out for the purposes of the EIS which was submitted in 2016. The EIS states that the exercise was conducted in accordance with the then extant EPA guidance note on air dispersion modelling from industrial installations (AG4). A guidance note issued by Transport Infrastructure Ireland (TII) on the treatment of air quality during planning and construction of national road schemes is referred to a number of times in discussing the modelling exercise. The section in the EIS which discussed ecologically sensitive sites uses a deposition velocity for nitrogen of 0.001 meters per second (m/s) but does not cite a source for that figure. Using that figure it concludes that the maximum GLC for NO_2 was at Bunlicky Pond and represented 45.1% of the annual mean in the relevant AQS for the protection of vegetation. Overall, the results of the exercise show two things namely that the predicted concentration of NO_2 and NO_x was well below the levels in the relevant air quality standard (AQS) and that, in fact, the levels of both forms of nitrogen would reduce under the revised licence conditions.

232. The matter was revisited by ICL in 2018 in the context of a request for further information from the EPA dated 1st November 2018 and an NIS which was submitted in December 2018. The NIS included a further report by Arup on the Assessment of Atmospheric Emissions as an appendix. Insofar as Dr Shanahan complains that different figures are used by Arup in the various different reports it is crucial to understand that between the 2016 assessment in the EIS and the 2018 Air Emissions Report, the terms of ICL's licence had been revised by the EPA in 2017 on foot of a review to ensure compliance with the CID BAT levels. In particular, the ELV for NO2 was significantly reduced – from 800mg/m3 to 500mg/m3 at kiln 6. In 2016 the EIS anticipated that there would be decreases in the GLC of nitrous oxides due to the then expected implementation of more stringent ELVs under the CID BAT conclusions. By 2018 the modelling based on the existing maximum ELVs in the conditions attached to ICL's licence as revised in 2017 showed these

decreases. Because Arup was responding to requests by the EPA to reflect various changes in the modelling of emissions under the proposed scenario, these figures necessarily changed. However, so did the figures for the existing scenario as the existing scenario itself had changed in 2017. Consequently the 2016 and 2018 figures cannot be directly compared since neither the existing scenario nor the proposed scenario under discussion in each case are identical nor can a figure from one analysis be extracted and presented as an unexplained item by reference to the other.

233. The December 2018 air quality assessment proposed, for the first time, that coal mill 6 would no longer be used as an emission point and that its emissions would be ducted through kiln 6 instead. Further, the proposed scenario was expressly stated to include the increased volumetric flow rates sought as part of the licence revision. This was in response to a request from the EPA in its 1st November 2018 request for further information that the increase in mass emissions and the resultant changes in GLCs be directly factored into the analysis. The response includes, at Table 11, a mass emissions calculation for the existing and proposed scenario with the latter scenario including the requested increased flow rates. Again, the predicted GLCs including predicted background levels, were well within the relevant AQS and achieve what is described in the report itself as "good compliance". They also show a reduction in the level of both pollutants (NO_2 and SO_2) from the existing scenario.

234. The 2018 report includes an assessment of the impact of these air emissions on ecologically sensitive sites at para. 4.7 – an analysis which is discussed in greater detail in the text of the NIS itself. This section looked at the maximum predicted GLC of NO_x (both background levels and those predicted to arise from the activity) at the most sensitive part of the site (i.e. its boundary at Bunlicky Pond). This was found to be less than half of the limit imposed in the relevant standard for the protection of vegetation. The report again

assumed a deposition velocity of 0.001 m/s and using a formula for the calculation of nitrogen deposition concluded that the total value remained well within the UNECE critical load for the relevant habitat type. This value is expressed in the form of 0.80kg N/ha/yr which I understand relates to the deposition per hectare per year. The report does not state that the figure assumed for the deposition velocity was taken from the TII guidance but we know from subsequent correspondence that this was the source.

235. On 29th May 2019 in a request for further information which raised ten issues under the heading Assessment of Atmospheric Emissions, the EPA asked ICL to recalculate the impacts using deposition velocity values recommended by the UK Environmental Agency. These values were 0.0015m/s for grassland and 0.003m/s for forest. It is significant to note that these figures came from a Technical Guidance Note issued by the EA in March 2014 and had, at that time, no official status in Ireland. They were not part of the EPA's own guidance note AG4 which was issued in 2010 prior to the adoption of these standards by the UK EA. The EPA was of course perfectly entitled to ask ICL to recalculate the potential for nitrogen deposition using a stricter or more conservative standard. The EPA subsequently adopted the EA's deposition velocity rate in a revision to AG4 issued by it in 2020. These are now the rates to be used in Ireland in air dispersion modelling exercises.

236. Thus, this was the officially recommended figure to assume for the deposition velocity of nitrogen by the time the oral hearing was held in December 2020. However, it had not been at the time the modelling exercises were initially carried out in 2016 and 2018. A modelling exercise carried out prior to 2020 using the only Irish guidance available at the time cannot be characterised as "flawed" because a more stringent assumption is subsequently adopted. The scientists did not use "incorrect" values and any inference that the exercise was not carried out appropriately is rejected.

237. Of course, as I have observed, the EPA was perfectly entitled to ask that the more stringent value be used and this was duly done by Arup on behalf of ICL. The response to the request for further information contained a lengthy section dealing with various queries raised under the heading of Assessment of Atmospheric Emissions. When both of the more stringent figures were used as the deposition velocity, the result (described as the "dry deposition flux") increased over the original estimate but remained well below the UNECE critical load for nutrient nitrogen deposition. The increase was from 0.8kg N/ha/yr to 1.15kg and 2.21kg N/ha/yr respectively and the UNECE critical load for the relevant habitat type is between 5 and 10kg N/ha/yr. In fact, the most stringent UNECE standard is 3kg per year, and that is also met.

238. Ms. Foley argues that there was no revision of the NIS in light of the increases shown when the increased deposition velocity rates are used. However, ICL's response expressly addressed this stating that a full review of the NIS had been undertaken but that its conclusions remained valid and no changes were required. Similarly, no changes were required to the flora and fauna (biodiversity) chapter of the EIS. This is unsurprising. Although use of the higher deposition velocity resulted in an increase in the predicted deposition rate or dry deposition flux, the levels were still well within the UNECE critical load levels and, as such, the conclusion that they did not give rise to a potential adverse impact on the EU sites was justified.

239. Much of Dr Shanahan's evidence is critical of the NIS for relying on data in the EIS which she asserts to be "incorrect". For the reasons I have set out above, I do not accept that the approach taken in the initial air dispersion modelling exercises was incorrect. It was acceptable based on the guidance available at the time and was, at the request of the EPA, revised when higher standards became applicable. Insofar as Dr Shanahan complains that it has not been demonstrated that the increased deposition rate was assessed as part of the NIS,

it is clear from the response to the request for further information in 2019 that the NIS was reviewed in light of this and other changes but that the conclusions previously reached continued to remain valid. For the reasons I have already identified - due to the fact that the ultimate figures are well within the UNECE critical load and the prediction that there will be an overall decrease in the ground level concentrations of NO_2 and NO_x - there does not appear to be any reasonable basis for suggesting that this conclusion was not valid or that there was any reasonable scientific doubt about it.

240. Dr Shanahan seems to assume a linear increase in the ground level concentration of NO_2 when the deposition velocity figure is increased. She suggested there would be an increase of 300% in ground level concentrations when the deposition velocity is changed from 0.001 m/s to 0.003 m/s. However, as I understand it deposition velocity is not the only parameter involved and the actual results when the deposition velocity rate was changed (from 0.8kg to 1.15kg and 2.21kg – N/ha/yr respectively) do not bear out this assumption.

241. Further, Dr. Shanahan points to differences between the values cited in the various reports using the GLC of NO_x as an example. As I understand the reports there are differences between the 2016 and the 2018 analysis arising in part because the *"existing"* scenario changed in 2017 when the licence was revised at the instigation of the EPA to ensure compliance with the CID on BAT in the cement industry and in part because the 2018 analysis expressly factored in the increased volumetric flow rates to the proposed scenario. This resulted in increases to the total predicted GLCs which can be seen if Table 8.8 in the EIS is compared to Table 8 of the report appended to the NIS, both of which show ground level concentrations of various substances. However, what seems to me critical for the purposes of the overall analysis is that even the higher figures still show good compliance with air quality standards and an overall reduction of the relevant pollutants. I don't think

figures can be taken from one table and compared unfavourably to those in a different table when the exercise has been carried out on a somewhat different basis each time.

242. By now, we have certainly reached the point where the court should defer to the EPA's expertise in this area. I do not think that the complaints made by Dr. Shanahan are such that they undermine the validity of the modelling exercise carried out on behalf of ICL bearing in mind that that exercise was interrogated in detail by the EPA through its requests for further information before it was examined at the oral hearing. Relevant extracts from the chairperson's report, which was adopted by the EPA, have been set out in detail in the High Court judgment. I agree with the trial judge's conclusion that this ground does not form a basis for successfully challenging the decision of the EPA and does not give rise to a gap or lacuna in the EPA's analysis which could be said to amount to a reasonable scientific doubt.

243. The next element of Ms. Foley's complaint is to the effect that the worst case scenario was not properly modelled. The model was expressly formulated on a conservative basis to reflect the worst case scenario concentrations which could arise and both the EIS and the 2018 report explain how this was achieved. As I understand the argument it is a narrower one, again based on Dr. Shanahan's evidence. Ms Foley argues that emission limit values as imposed by the licence on emissions from the activity govern the maximum amount of various pollutants that may be emitted, for the purposes of this discussion in gas or vapour, from specified emission points at the installation. However, the revised licence also permits an increase in the total amount of emissions from the existing level of in the volumetric gas flow rates. The increase requested was from a maximum rate of 335,000m^3 per hour or 8,000,040m^3 per day to 500,000m^3 per hour or 12,000,000m^3 per day. It is argued, correctly, that save in cases where there has been a reduction in the ELV for a pollutant, the amount of pollutants emitted in real terms may increase when the overall volume of vapour to be emitted is increased. This is described by Ms. Foley's counsel as the mass emission rate.

The argument was made using SO^2 as an example but holds valid for any substance in which the ELV remains unchanged as between the existing and the revised licence.

244. Whilst it is correct to say that there may be an increase in the emission of pollutants by virtue of an increase in mass emission rates it is not, in my view, correct to suggest that the EPA has not taken proper account of this. The request for further information dated 1st November, 2018 asked ICL to update their emissions analysis and specifically asked them to address the mass emission change associated with increases in the volumetric flows and the consequent impact on GLCs of the various pollutants. This was duly addressed by ICL and the 2018 report on the assessment of atmospheric emissions (also submitted as part of the NIS) expressly factors the proposed increased volumetric flow rates into the proposed scenario which is the subject of the model. This is discussed at s. 4.6 of the report and the results of the modelling exercise including the increased flow rates is shown in tabular form at Table 11. This shows, *inter alia*, a percentage increase in mass emissions (predicted over existing) of approximately 35% in respect of each of the substances which were highlighted in argument before this court (namely nitrous oxides, sulphur dioxide and chromium). However, there was still an anticipated decrease in resulting ground level concentrations, albeit not to the extent originally predicted in 2016 when the increase in mass emissions had not been factored into the analysis. Following the oral hearing the chairperson's report expressly notes (at para. 2.3.1) that the model assesses an increase in the flow rate and gives the figures in respect of each emission point from which an increase was requested. Given the express treatment of this issue by the EPA it is simply untenable to contend that the matter was not properly dealt with.

245. During the course of the hearing of the appeal, Counsel on behalf of Ms. Foley seemed to agree that the increase in potential pollutants as a result of an increase in mass emissions had in fact been dealt with by the EPA but shifted his argument so that it merged with the

third point made on Ms. Foley's behalf. This contends that no proper assessment was carried out in respect of air emissions during the six month period allowed by the licence for ICL to complete the works necessary to duct the emissions from coal mill 6 through kiln 6. Consequently, counsel argued that whilst both emission points were assessed as part of the 2016 air emissions assessment and the increased volumetric gas flows were assessed as part of the 2018 report, there was no assessment of simultaneous emissions from both kiln 6 and coal mill 6 having regard to the increased volumetric flow rates (*i.e.*, under the terms of the revised licence). Counsel, relying on Dr. Shanahan's evidence, argued that the dispersion of pollutants though the air depends critically on the type of emission points you have, including the height of the stacks and their location relative to each other which affects the pattern of dispersal and that this was never properly assessed.

246. The trial judge dealt with this argument in the preliminary part of his judgment dealing with matters which had not been properly pleaded and held that this argument did not come within the scope of the grounds as pleaded by Ms. Foley. I agree with him in this regard. However, because the argument is also presented as a failure to properly consider worst case scenarios, which is pleaded (although without the level of specificity required by O.84, r.20(3)) I will briefly deal with it. Firstly, it might be important to note that although the installation includes a number of points at which emissions to air are permitted under the existing licence only two of these, namely kiln 6 and coal mill 6 allowed the emission of the pollutants which have been the subject of discussion in the preceding (and indeed subsequent) sections of this judgment. All of the other emission points permit only the emission of particulates (*i.e.*, dust). Thus, in terms of the dispersion of these pollutants only two emission points are relevant.

247. More significantly, although the licence allows a period of six months for the necessary works to take place, during which time coal mill 6 may continue to operate as an emission

point, it does not allow for the increase in volumetric flow rates through kiln 6 until coal mill 6 has been decommissioned. This is evident from the way in which Schedule C to the licence is structured. At C.1.1 it sets out in tabular form the permitted emissions through kiln 6. Under the volume to be emitted the figures given reflect the increased flow rates of 500,000m^3 per hour and 12,000,000m^3 per day. However, this is subject to a note which reads *"The volume to be emitted shall be limited to 8,000,040m^3 per day and 335,000m^3 per hour until Coal/Pet Coke Mill (A2/02) is decommissioned"*. This is matched by a note in the following table which relates to what has been described in this judgment as the emission point at coal mill 6 but which is referred to in the licence as Coal/Pet Coke Mill (A2/02). There is no increase permitted to the volumetric flow rates from this emission point and it is subject to a note stating that *"The licensee shall duct the emissions from A2/02 into the stack associated with emission point A2/O1 within six months of the date of the grant of this licence. Emission point A2/O2 shall thereafter be decommissioned."* There are no increases in the emission limit values relating to any parameter which may be emitted through kiln 6 compared to those permitted in the existing licence. In fact, there is a reduction in the ELV applicable to sulphur oxides and dust/particulates. In addition, emissions of oxides of sulphur and oxides of nitrate through coal mill 6, permitted under the existing licence, are not permitted under the revised licence. These reductions apply from the date of the licence and are not stayed pending the decommissioning of coal mill 6. Therefore, the analysis as conducted in 2016 which assumed emissions through both of these emission points simultaneously remains valid. If anything, the actual position will be more conservative since there will be a reduction in the permitted emissions from coal mill 6 for as long as it continues to be used during the 6 month period and there are reductions in the ELVs applicable to kiln 6 which take effect immediately even though the increase in volumetric flow cannot take effect until coal mill 6 has been decommissioned. Therefore, the failure to

assess simultaneous emissions at increased volumetric flow rates is not a flaw as this is not permitted under the terms of the licence.

248. As might be expected, the detailed provisions of the licence were addressed by the EPA and ICL in their replies to Ms. Foley's submissions on this point. Counsel for Ms. Foley in turn in his reply suggested that a continuance of the existing licence conditions for a period of six months (which is not exactly correct since more stringent ELVs will apply immediately) could not be relied on because the existing licence conditions dating from November 2017 were premised on the 2016 EIS which, he contended, was premised on the wrong nitrogen deposition velocity and thus was a flawed assessment. I totally reject this argument. Firstly, there was absolutely no evidence before the court as to whether an environmental impact assessment was carried out in connection with the 2017 licence review and, if so, whether it was based on the 2016 EIS which had been submitted in connection with a separate application for a review by ICL. Secondly, for reasons which I have explained above, the deposition velocity rate used in the 2018 report was not *"incorrect"* such that any analysis based on it was *"flawed"*; it was simply replaced by a more stringent standard in 2020. Historic assessments conducted at a time when different standards or guidelines were applicable do not become retrospectively flawed by the subsequent adoption of stricter standards.

249. For all of these reasons I reject the argument made on behalf of Ms. Foley of a failure to properly consider simultaneous emissions from two emission points prior to the decommissioning of one of them. My views in this regard are necessarily *obiter* where I agree with the trial judge that the point has not been properly pleaded.

Chromium VI or Hexavalent Chromium

250. Ms. Hayes' arguments regarding air emissions focused on chromium, emissions of which are licenced as part of a group of heavy metals, the sum of which cannot exceed $0.5mg/m^3$. Chromium occurs naturally in a number of forms, particularly as chromium III but it is emitted from certain industrial processes in a non-natural form as chromium VI. According to the evidence before the EPA, chromium VI is toxic to humans and a known carcinogen. Further, the evidence established that chromium VI is unstable and reduces quickly to chromium III – although this is a very simplistic explanation as both those forms of chromium exist in multiple forms in compounds with other substances. Because chromium VI is unstable it is difficult to measure accurately. The documentation included in the exhibits and the material referenced therein suggests that concerns about chromium VI relate primarily to human health and particularly to the health of industrial workers exposed to high levels of chromium VI in the course of their employment. There are also concerns about the presence of chromium VI in drinking water.

251. Although counsel for Ms. Hayes seemed to present his case regarding chromium VI as part of a broader argument concerning the carrying out of an appropriate assessment and the provision of reasons to justify the absence of scientific doubt as to its conclusions, no particular argument was made identifying the potential impact of chromium VI on any of the EU sites. I mention this because in circumstances where chromium VI reduces very rapidly to chromium III, Dr. Zabetakis (who gave evidence to the oral hearing on the effects of chromium VI on human health and swore an affidavit on behalf of Ms. Hayes) states that it should be monitored close to the emission point rather than some distance away. Presumably this is because the levels of chromium VI decline the further you move in space and time from the point of emission. Nothing before the court suggested that there was a

particular risk to the integrity of any EU site because of the emissions of chromium from the installation - all EU sites being some distance from the emission point.

252. As with Ms. Foley's arguments regarding nitrates, Ms. Hayes' arguments regarding chromium VI had a number of strands. These started from the premise that the entire of the assessment conducted in the licence review process was deficient because it did not use the correct baseline which Ms. Hayes contended involved assessing the site as if the existing activity did not exist. She also contended that the reasons given were inadequate and did not explain why Ms. Hayes' arguments on these issues were rejected. Finally, and most significantly, she contends that the EPA erred in accepting evidence given to the oral hearing by ICL's expert regarding the measurement of background levels of chromium VI in what is termed "total chromium", i.e., all forms of chromium emitted including both chromium III and VI.

253. The argument as to the correct baseline by reference to which the EPA should assess proposed changes to a licenced activity was linked to the scope of a licence review under s. 90 of the EPA Act, 1992. Where the EPA is asked to licence an activity for the first time on a greenfield site the position is relatively straightforward. The baseline is the greenfield site as it is and the impact of the operation of the proposed activity can be measured by reference to that baseline. The position is not so clear cut when the EPA is asked to review a licence because the site on which the licenced installation is located will already be impacted by the carrying on of the existing licenced activity. In those circumstances counsel argued that nonetheless the assessment had to be conducted by reference to a baseline where, hypothetically, the licenced activity did not exist.

254. The main rationale advanced at the hearing of the appeal for this argument was that on the review of a licence under s. 90 it is open to the EPA either to amend the existing licence or, as it did in this case, to grant a revised licence under s. 90(2)(b). In effect, this operates

to re-licence the entire activity subject to modified terms and conditions. Because the revised licence operates to licence the entire activity, it was contended that the EPA should have considered the impact of the entire activity on the site as if the site were entirely unaffected by the fact that the licenced activity was already established there.

255. Reference was also made to the importance of a baseline study which, in certain circumstances, is required to be provided under Art. 22 of the Industrial Emissions Directive 2010/75/EU. The importance of a baseline study lies in the obligation on an operator to restore the site on the cessation of the activity to the state identified in the baseline study. However, this argument can be readily dismissed. Strictly speaking, under Art 22 of the IED a baseline study is only required where the operation of an installation starts or the permit is updated for the first time after 7th January, 2013, being the transposition date for the IED. There has been a cement plant at this location since 1938, it has been licenced since 1996 and the licence was updated to comply with the IPPC Directive in 2009 – all of which significantly pre-date the coming into effect of the IED. Consequently, even though the EPA asked for the submission of a baseline study, this was not pursuant to the obligation under Art. 22 of the IED. More importantly Art. 22(2)(a) requires a baseline report to include information on the present use and, where available, past uses of the site. Thus, the IED implicitly acknowledges that not all licences will be granted in respect of activities located on greenfield sites and does not ignore or require the hypothetical removal of the effects of an existing use from the study.

256. With respect, the argument that the baseline for review must assume the absence of a long-term established and licenced activity which is in fact present is absurd. When the court questioned counsel as to how the greenfield baseline of a site on which an industrial activity has existed since 1938 should be identified, he suggested that the EPA could look at comparable sites in urban locations elsewhere in order to identify the *"average background*

levels" for the site. Instead of comprising an actual study of the site this would be an entirely hypothetical exercise. No one site will be sufficiently comparable to another to enable a meaningful baseline analysis for a site in Limerick to be prepared by reference to a supposedly equivalent site in Cork or Galway. Even if you were to identify a roughly comparable site in terms of proximity to an urban centre (the only factor discussed by counsel), it would necessarily be different in terms of its topography, factors such as the prevailing wind speed and direction, the proximity of adjacent protected habitats etc.

257. It is also relevant to bear in mind the options open to the EPA under s.90 where a licensee applies for the review of a licence. It may refuse the licence, it may modify the existing licence or it may grant a new licence which serves to re-licence the entire site (with both a modified and a new licence referred to as a *"revised licence"*). What the EPA cannot do on the application of a licensee for a review is to revoke the existing licence. Therefore, in my view it is correct for the EPA to approach the analysis of requested revisions to a licence by considering the effects the alterations to the existing, licenced activity would have compared to the effects of the activity operating under the existing licence. I am satisfied that this appellant's baseline argument is not meritorious.

258. As it happens, the lack of reality to the notion of a hypothetical baseline is apparent when the other aspect of Ms. Hayes' chromium argument is considered. As with nitrates, part of the air modelling exercise sought to identify the ground level concentrations (GLCs) of chromium which would arise from emissions at the level permitted and at the flows permitted. To do this it is necessary to add the predicted emissions of chromium to the existing background levels. In overall terms, this was not problematic for chromium generally with the impact of chromium emissions, including background levels, predicted to be less than 1% of the acceptable limit. Further, the 2018 air emissions report found that although there would be an increase in mass emissions in respect of the proposed scenario,

there would be a slight reduction in ground level concentrations of chromium over existing levels.

259. However, the picture became more complex when the analysis focused on the amount of chromium VI that was likely to be present in those amounts of chromium. The difficulties arose in part because chromium VI is unstable and reduces to chromium III. Therefore, because it is produced by industrial activity, the greatest proportion of chromium VI is likely to be found at the point of emission - both in time and place - and it will reduce thereafter. It follows that it is difficult to measure and so assumptions are made as to the likely levels of background chromium VI present for the purposes of ascertaining compliance with relevant standards. Reverting briefly to the baseline issue, because chromium in its natural state does not usually take the form of chromium VI, the reason there is a background level of chromium VI is due in large part to the history of industrial activity at the site. Comparison with a hypothetical greenfield site would remove much of the expected presence of background levels of chromium VI. The effects of the existing activity have to be taken into account in order for the analysis to be meaningful.

260. The 2016 EIS and 2018 air emissions report considered chromium generally but did not expressly address the presence of chromium VI. In its request for further information dated 29th May, 2019 the EPA asked ICL, *inter alia*, to update its assessment of atmospheric emissions *"to include an assessment of the risk of impacts due to Chromium VI by reference to the EA guideline value of 0.002 [micrograms] /m^3".*

261. ICL duly replied in July 2019 noting initially that predicted concentrations of total chromium were in good compliance with the EA standard of 5 micrograms/m^3 and that there would be no impact on any ecologically sensitive site. It then moved to consider the levels of chromium VI in the total chromium and used an US Air Resources Board (ARB) refence from 1986 to assume that chromium VI comprises between 3% and 8% of total ambient

chromium. Applying these percentages to the chromium emissions from the process, the predicted concentration of chromium VI fell well within the 0.002 microgram/m^3 guideline. However, when the same guideline was applied to the background concentration of chromium then, at the higher end (8%), the assumed level of chromium VI in the background concentration already exceeded the guideline before the expected contribution from the activity was added. If the lower end of the range were applied (3%), neither the background concentration nor the background plus emissions from the activity levels exceeded the guideline. It was agreed that the tipping point fell somewhere between 4% and 5%.

262. In her objection to the proposed determination Ms. Hayes submitted that, having regard to the precautionary principle, ICL should not be allowed to rely on the lower rather than the higher level of assumed chromium VI in background chromium. In her submission to the oral hearing, Ms. Hayes expanded on this contending (incorrectly in my view) that ICL had ignored the 8% figure entirely and submitted the 3% figure to bring chromium VI levels within the permitted guidelines. In fact ICL's response to the request for further information had provided details applying both figures and had noted the exceedance at the higher figure.

263. Ms. Hayes also submitted that the US EPA now regards 100% of chromium to be chromium VI due to its toxicity. No source was cited for this and indeed it is not clear if this is correct as one of her experts for the purposes of the litigation (Prof. Connett) suggests that the figure now applied in the US is 34% (*i.e.*, one third).

264. Dr. Zabetakis also gave evidence to the oral hearing as to toxicity of chromium VI and the risks it posed, especially in drinking water. He was of the view that, in principle incineration is not safe and, regardless of WHO or EU guidelines, there are no safe levels of heavy metals, including chromium VI.

265. The difficulty with Ms. Hayes' evidence, which was given on the second day of the oral hearing, is that it did not address or respond to important evidence given by Ms. Whyte of Arup on behalf of ICL on the first day of the oral hearing. Ms. Whyte's evidence was also contained in a statement of evidence posted on the oral hearing website. Crucially, Ms. Whyte said that monitoring had been carried out on the licensed site between January and February 2020 in order to ascertain the exact levels of chromium VI present in the ambient chromium on site. Total chromium was measured at 0.0023 micrograms/m^3 and chromium VI at less than 0.000057 micrograms/m^3. Analysis of these results showed that the level of chromium VI was a maximum of 2.5% of the total chromium. When that percentage was applied to both the emissions from the activity and the background concentrations, the combined total was 56% of the EA limit. This evidence was not challenged by any party to the oral hearing. No issue was taken with the figure itself nor with the methods of sampling and analysis by which it had been reached nor was any complaint made that the raw data relating to it had not been made available.

266. Ms. Hayes made closing submissions on the final day of the oral hearing which repeated her argument regarding the precautionary principle and the requirement to assume a level of 8% rather than 3% of chromium VI in ambient chromium. She did not address Ms. Whyte's evidence regarding the measured levels of chromium VI in the total chromium on site. The chairperson in his report accepted the evidence that had been given by Ms. Whyte and found, based on the 2020 monitoring, that the ambient concentration plus the predicted concentration of chromium VI resulting from ICL's proposed modifications to the licence would remain within EA guidelines. Consequently, he did not recommend any change to be made to the emission limit value specified for chromium (which, as noted, is a limit applied to the combined emission of a number of heavy metals).

267. In her application for judicial review Ms. Hayes pleads that the licence permits emissions of chromium VI which will exceed the relevant standards (the UK EA standard of 0.002 micrograms/m^3 has been now adopted in the 2020 version of the EPA's Guidance Note AG4). Although the pleadings are somewhat difficult to decipher, for the purposes of this argument the plea seems to be that the EPA erred in accepting Ms. Whyte's evidence as to the background chromium levels on site and by failing to require certified laboratory test results. Although it is not expressly stated in the text of the pleas, I have assumed the references here are to chromium VI. It is contended that this deprived the public of their opportunity to participate effectively in the decision making process contrary to Art. 6 of the EIA Directive.

268. As noted earlier in this judgment, the EPA and ICL took issue in their opposition papers with the fact that Ms. Hayes' case, which challenged numerous aspects of the scientific analysis carried out by the EPA, was not supported by any affidavit from a scientific expert. Subsequent to the filing of opposition papers, a number of additional affidavits were filed on behalf of Ms. Hayes including five from expert witnesses. In paras. 124-135 above I distinguished between affidavits sworn for the purposes of identifying a gap or a lacuna in an assessment which would preclude the decision maker being satisfied beyond a reasonable scientific doubt as to its conclusions and an affidavit sworn for the purposes of revisiting, on the merits, the assessment conducted and the decision made. I have already held there to be no bar in principle to the filing of affidavits sworn by expert witnesses after the application for judicial review has been lodged nor after opposition has been filed nor indeed after the 8 week period for bringing proceedings has expired. However, there is a difficulty with affidavits being sworn by expert witnesses who were not involved in the process before the EPA when that is done for the purposes of taking issue on

the merits with the scientific analysis conducted and the conclusions reached as part of that process.

269. Frequently, this leads to a very unsatisfactory situation. Experts whose views might have made a valuable contribution to the decision maker's understanding of the technical issues and the conclusion to be reached in the course of that process are not engaged for the purposes of the process itself. Rather they are engaged after the event for the purposes of litigation to examine and critique the evidence that was adduced and the conclusions reached based on that evidence in the earlier process. In effect, the court is then asked to decide that the decision maker was wrong to act on foot of the expert evidence before it, often, as here, uncontradicted expert evidence, and to accept that the decision maker would and should have preferred evidence that was not actually adduced.

270. With respect to the undoubted expertise of Professor Connett, this is what his affidavit in this case seems designed to do. In essence, he takes issue with the evidence given by Ms. Whyte to the oral hearing and in her affidavit filed in response to the proceedings. He queries the rationale for the lower 2.5% figure used by her and questions the validity of the sampling and testing carried out in 2020, a criticism largely premised on an absence of documentation and information about the monitoring and testing process. Dr. Zabetakis, whose evidence at the oral hearing touched on chromium VI and the health hazards it presents, goes significantly further than that evidence in his affidavit. He also questions the reliability of the sampling exercise carried out in early 2020. Interestingly, he makes the point that chromium VI should be monitored close to the emission point and not 2.3kms away as was the case here. This is because the percentage of chromium VI in the total chromium will be highest at the point of emission but will decline over time and place. This certainly makes sense if the object of the exercise is, for example, a public health analysis to determine the potential exposure of industrial workers to chromium VI emitted by the industrial activity in

which they are engaged. However, it is clear from Ms. Whyte's affidavit that the purpose of the exercise here was to determine ambient background levels of chromium VI which she says, according to the relevant air quality standard, requires a sampling point that is not influenced by industrial sites in the vicinity. Consequently, the sampling point was chosen consistent with that standard.

271. More generally, in her affidavit Ms. Whyte responds to the factual pleas made at para. 61 of the statement of grounds regarding the 2.5% concentration of chromium VI, expressly refuting the suggestion that the sampling was carried out at a time the plant was shut down which, because of the lack of process emissions, would lead to artificially low levels of chromium. She also sets out the manner in which the sampling was carried out, the method of analysis used by the Dutch laboratory to which the samples were sent and confirms the results of that analysis. It is crucial in the context of Ms. Hayes' argument that not only was no issue taken with Ms. Whyte's evidence on this point at the oral hearing, Ms. Hayes did not seek to cross-examine Ms. Whyte on her affidavit in the proceedings before the High Court.

272. In *RAS Medical v Royal College of Surgeons* [2019] IR 63 the Supreme Court held that it was inappropriate for sworn affidavit evidence to be rejected either by reference to other sworn affidavit evidence or documentary materials without giving the deponent concerned an opportunity to answer any questions as to why the sworn evidence should not be regarded as credible or reliable. Clarke CJ stated at para. 92 of that judgment:

> *"But it is frankly not appropriate for parties to enter into controversy as to the facts contained either in affidavit evidence or in documents which are admitted before the court without successful challenge, without exploring the necessity for at least some oral evidence. If it is suggested that there are facts which are material to the final determination of the proceeding and in respect of which there is potentially*

conflicting evidence to be found in such affidavits or documentation, then it is incumbent on the party who bears the onus of proof in establishing the contested facts in its favour to use appropriate procedural measures to ensure that the potentially conflicting evidence is challenged. Where, for example, two individuals have given conflicting affidavit evidence and where it is considered that a resolution of the dispute between those witnesses is necessary to the proper disposition of the case, then there has to be cross-examination and the onus in that regard rests on the party on whom the onus of proof lay to establish the contested fact."

273. The onus of proof in this application lay with Ms. Hayes. This is an important point as the court is engaged in a process of judicial review on foot of an application brought by Ms Hayes to which the normal rules as to the conduct of litigation apply. The court is not responsible for carrying out an appropriate assessment in which it asks itself if it has doubts as to whether the necessary level of scientific certainty has been reached. The onus lies on Ms Hayes to show, on the balance of probabilities, that the EPA could not have been satisfied as to the absence of such doubt or that it made a legal error in treating itself as being so satisfied. The filing of a contrary expert affidavit does not necessarily mean that a court must accept that there are now scientific doubts as to the reliability of evidence led at the oral hearing. If resolution of an issue is necessary in order to decide the case in an applicant's favour and neither side has cross examined the other side's experts on their affidavits, then the applicant will rarely have discharged the burden of proof that lies on them by virtue of being the moving party in the case.

274. Ms Hayes already faced a significant difficulty by reason of her failure to challenge Ms. Whyte's evidence during the oral hearing or to adduce any contrary expert evidence on her own behalf. I might note in passing that on the final day of the appeal hearing counsel for Ms Hayes sought to introduce an additional affidavit from her to make complaints about

the conduct of the oral hearing and her ability to connect remotely to it. The court refused to admit this affidavit. Ms Hayes had already sworn two affidavits in the proceedings in which no mention was made of these issues. In his judgment the trial judge expressly notes (at para.163) that Ms Hayes did not engage with the evidence provided by Ms Whyte to the oral hearing. If Ms Hayes wished to adduce additional evidence to dispute that finding, the proper course was to apply for leave to do so in the usual manner in the directions list and before the appeal was listed for hearing, not to turn up on the last day of a 3 day appeal with a new affidavit and to expect the court and the other parties to deal with that new evidence.

275. In contending that the EPA should not have accepted Ms. Whyte's uncontradicted evidence, Ms Hayes bore the onus in the judicial review proceedings of establishing that that evidence should not have been accepted by the EPA. This she has failed to do. Introducing contrary expert evidence at this stage which, had it been before the EPA, might have had a bearing on the manner in which the issue was treated, does not discharge the onus of proof that lies on Ms. Hayes to establish that the EPA erred in accepting the evidence of this expert witness in the first instance.

276. For these reasons, I agree with the conclusions reached by the trial judge and I reject Ms. Hayes' grounds of appeal regarding chromium VI. For the sake of completeness, I should note that insofar as it is contended that the EPA did not give adequate reasons for rejecting Ms. Hayes' submissions, this point is misconceived. Ms. Hayes made a submission to the effect that the higher rather than the lower end of an assumed range for the percentage of chromium VI in total ambient chromium should be applied. The EPA accepted expert evidence from Ms Whyte as to the actual percentage of chromium VI present in ambient chromium onsite rather than relying on the application of an assumed range. Ms. Hayes did not address these actual figures nor did she question the accuracy of the testing that had produced them. She did not make any case as to why the assumed range should continue to

be applied even though actual figures were now available. In effect, Ms Hayes' case was overtaken by the evidence at the oral hearing and in circumstances where the EPA gave reasons as to why it was satisfied that the revised licence operated in accordance with the prescribed ELVs would not cause environmental pollution, there was no additional onus on it to expressly disagree with Ms Hayes' submission.

277. Equally I do not accept that the adducing of evidence by Ms Whyte at the oral hearing and its acceptance by the EPA was a breach of fair procedures, whether under Art. 6(3) of the Habitats Directive or otherwise. Firstly, the evidence was not simply given orally but was provided in the form of a written statement which was placed on a dedicated oral hearing website thus ensuring public access to that evidence. Secondly it is important to understand that an environmental assessment is a process and, to be effective, it must allow for changes to be made and new evidence adduced during the course of the process. Much of the intended benefit of public participation in environmental decision making would be lost if the developer could not add to, change or supplement the material originally supplied by it in response to submissions made by the public or issues raised by the decision maker which are, in turn, often informed by the submissions made by the public.

278. The six day oral hearing was a major part of the process conducted by the EPA to examine the objections which had been received to the proposed determination. The evidence adduced by ICL was not simply a repetition of the contents of the EIA, NIS and other documents submitted by it. Rather it addressed issues of concern to the EPA and to those who had made written objections in advance of the oral hearing. It was open to anyone attending the oral hearing to take issue with ICL's evidence and to question their witnesses, not just after they had given their evidence but at various times during the course of the oral hearing. Neither Ms Hayes nor anyone else in attendance challenged the evidence given by Ms Whyte, whom I note was asked to address various issues on dates other than the day on

which she gave her formal evidence. The EPA must be entitled to accept evidence which is not challenged and where no contrary evidence has been led to controvert it. This was not a breach of fair procedures.

Bryophytes

279. The last major argument made by Ms. Hayes centred on the absence of a bryophyte survey from the NIS submitted by the ICL. This is linked to concerns expressed by her regarding air emissions as bryophytes (a group of species comprising different types of mosses and liverworts) are especially sensitive to pollutants dispersed by air such as nitrous oxides, sulphur dioxide and ammonia. The pleas made in the factual part of the statement of grounds record at para. 51 that in her submissions to EPA, Ms. Hayes had *"identified the impact on bryophytes as a pathway for adverse impact on the integrity of the lower Shannon Estuary SPA and SAC, in particular on the Bunlicky Clayfield pond part of the SPA"*. The legal ground at para. 5 dealing with *"Habitats"* is the same one discussed earlier in this judgment in connection with whooper swans. Paragraph 5.1 pleads that the decision is invalid because the EPA *"failed to assess all relevant habitats and species for which the Lower River Shannon Estuary SAC and the River Shannon and River Foynes Estuaries SPA are designated"* (this should read the River Shannon and River Fergus Estuaries SPA). These are the only two EU sites specifically mentioned anywhere in the legal grounds.

280. I have already rejected para 5.2 which pleads a failure to assess all habitats and species for all EU sites within the zone of influence of the plant for being too vague and general to ground a specific argument regarding any particular species or site. I take a similar view of paragraph 5.4. Paragraphs 5.6 and 5.7 deal with an alleged failure to conduct an *"in combination"* assessment and are not relevant to the issue the subject of the appeal. That

leaves paragraph 5.3 - *"an alleged failure to consider the pathways by which heavy metals could be discharged to the SPA and the SAC"* and paragraph 5.4 which reads as follows:-

> *"failed to consider whether there was evidence of impact on key sensitive species such as bryophytes which would indicate a need for further investigation of consequential impact of other species"*.

281. The respondent and notice party both responded with pleas to the effect that bryophytes were considered in the NIS and the chairperson's report and it was noted that they were not a qualifying interest for either the SPA or the SAC. Therefore, a survey of bryophytes was not required. They also pleaded that there was no expert evidence to ground the case made by Ms. Hayes. This led to the subsequent filing of a number of expert reports on her behalf including an affidavit from Professor O'Connell, a Professor of Botany at NUIG and from Dr. Sheehy Skeffington, a plant ecologist. Both of these individuals undoubtedly possess relevant expertise. Neither of them were engaged for the purposes of making a submission to the EPA during the course of the licensing process. Therefore, almost everything in their affidavits constitutes material which was not before the EPA when it made its decision. I will return to this point.

282. The case pleaded by Ms. Hayes regarding bryophytes does not suggest that they are a category of species which required to be surveyed because they formed an integral part of any habitat or that they were qualifying interests themselves regarding any designated site. Rather, the suggestion is that they are an indicator species which should be examined as part of an appropriate assessment because, due to their sensitivity to atmospheric pollution, any negative impact experienced by them could flag long term adverse impacts on other species. This is consistent with the case which was made by her in her objection to the EPA and at the oral hearing. This case was essentially general in nature and did not relate to any specific EU site nor to any qualifying interest in any of the EU sites identified in the NIS.

283. The case made on the appeal is very different, although from the judgement it would appear this was also the case made to the High Court. In essence, Ms. Hayes argues that it is irrelevant that bryophyte species are not qualifying interests for the designated sites. She relies on the decision of the CJEU in *Holohan v An Bord Pleanála* (above) to contend that a habitat survey of unprotected species present on the site must be carried out in order for an appropriate assessment to be complete. The trial judge did not accept this argument holding (at para. 213) that it was illogical and it would make no sense to designate sites for the protection of particular species if surveys (and by implication assessment) was required of all species present on the site and not just the designated species. He rejected her interpretation of the *Holohan* judgment in favour of that advanced by the respondent and notice party. He also rejected her contention that a bryophyte survey was required in circumstances where she *"has provided no evidence that there is any potential effect on the conservation objectives of these two sites arising from a potential impact on bryophytes"* (para 220).

284. Before I move to an analysis of the legal arguments is it necessary to address two preliminary and interrelated issues. The first of these concerns the scope of the pleaded case regarding bryophytes and the second the admissibility of the expert affidavit evidence sought to be relied on by Ms. Hayes. I have already addressed the latter issues generally at paragraphs 124-135 of this judgment. It is now necessary to consider the extent to which the court should have regard to the affidavit of Professor O'Connell. I note the counsel did not seek to open Dr. Sheehy Skeffington's affidavit. The admissibility of these affidavits was challenged during the appeal hearing and the court ruled that counsel would be permitted to refer to them within certain limits. Those limits allowed the affidavit evidence to be relied on either to provide context for the discussion of technical issues or to demonstrate a gap or lacuna in the appropriate assessment. In these circumstances, where an affidavit was not

then referred to by counsel, I do not propose to consider it or to treat it as being relied on for the purposes of the appeal.

285. Again, this court is faced with an unsatisfactory position resulting from the manner in which the admissibility of the affidavits was treated in the High Court. In para. 222 of his judgment, the trial judge describes Ms. Hayes' claim that there should have been a bryophyte survey as being *"without any evidence to support it"* and, thus, amounting to a mere assertion which did not give rise to a scientific doubt (per O'Neill J in *Harrington v An Bord Pleanála* [2014] IEHC 232). At ground 3 of the Notice of Appeal, the appellant pleads that the trial judge erred by failing to have proper regard to Professor O'Connell's evidence and his evidence is directly quoted in ground 4. In response, the EPA pleaded that the appellant cannot rely on Professor O'Connell's evidence when she *"confirmed to the High Court that she did not rely on anything beyond that which was on Agency's file"* which of course did not include Professor O'Connell's evidence. ICL similarly objected to a ground of appeal based on the contention that the High Court decision was contrary to Professor O'Connell's evidence in circumstances where *"it was expressly confirmed that the trial judge did not have to determine whether that evidence was correct or not".*

286. Thus, the trial judge, the respondent and the notice party all seem to have understood that the appellant was not relying on this evidence which was, apparently, not formally opened to the High Court. Counsel for the notice party however has quite fairly accepted that it was not formally withdrawn. In circumstances where an objection is taken to evidence as a result of which it is not formally opened to the court but none the less remains on the court file, the lawyers involved must make it clear to the trial court the extent to which they are still relying on that evidence. If disputed evidence is crucial to the case being made, its admissibility should be formally ruled on. I do not intend to criticise the trial judge in this regard. He was clearly given the impression (as were the other parties) that the evidence was

not being relied on and therefore its admissibility, which had been put in issue by the opposing parties, did not have to be ruled upon.

287. However despite the ambiguity, I also accept that counsel for Ms. Hayes did not intend to withdraw this evidence from the case – although quite what he expected the trial judge to do with it where it was objected to and not opened is unclear. Consequently, this court has to consider the extent to which it is admissible. Is it clear from the ruling referred to above that this court permitted reference to be made to Professor O'Connell's affidavit (amongst others) to the extent that it provided context for the case being argued or for the purposes of identifying a gap or lacune in the appropriate assessment. Some of what Professor O'Connell says generally about the importance of bryophytes and recent scientific developments in our understanding of the contribution they make to biodiversity certainly falls within the first of these permitted purposes, as does his evidence that they are especially sensitive to environmental pollution –something which was expressly acknowledged by ICL in the NIS. The bulk of his evidence, however, is directed at establishing that the EPA's appropriate assessment was incomplete because of the lack of a bryophyte survey and, by extension, of an assessment of bryophytes as an interconnected element of the protected habitats.

288. The difficulty with at least some of this evidence, apart from the fact that it was not given to the EPA and that the ICL expert witnesses did not have the opportunity to engage with it, is that it goes outside the scope of the case pleaded by Ms. Hayes. I noted earlier that the only two sites referred to in para. 5 of the legal pleas in her Statement of Grounds are the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. The reference to bryophytes in the factual portion of the statement of grounds (quoted at para 279 above) likewise only references these two sites. In so far as Professor O'Connell's evidence is relied upon by counsel to make a case regarding other EU sites within the zone

of influence of the project (Curraghchase Woods SAC and Askeaton Fens SAC) I must rule that evidence inadmissible. The appellant cannot seek to extend the scope of the pleaded case by reference to affidavit evidence adduced on her behalf without making a formal application to extend the grounds as pleaded.

289. I also have some residual concern in relying on the balance of Professor O'Connell's evidence because it was not clear from either his affidavit or his exhibited report exactly what material he was asked to consider before expressing the view that the EPA's appropriate assessment conclusion was not scientifically sustainable. The affidavit states that his review is confined to a review of documents to which he refers. These are not listed anywhere, and the only documents expressly referred to in the affidavit are his own report and the NPWS site conservation objectives. His report refers to the NIS and *"other documentation"* (which is unspecified) prepared by the ecologist who prepared the NIS and to the decision of the EPA. Reference is also made to the AA screening report, the EPA's screening decision and two requests – again unspecified – for further information and the responses thereto. No reference is made to either the inspector's report or to the report of the chairman of the oral hearing, which includes an account of the evidence given at the oral hearing.

290. In making these comments I do not intend to impugn the undoubted expertise of Prof. O'Connell in any way. However, when an expert witness with no prior involvement in a process is asked to address the manner in which particular matters were dealt with in order to comment on the reliability of the process, it is essential for the court to be apprised of the material on which the expert is being asked to comment. A witness cannot realistically be expected to express a view on the completeness of a process unless that witness has been provided with all the material relevant to that process. Insofar as the witnesses is asked to comment on the case made by the opposing party, they should be presented with that case in

its original and complete form and not merely with a summary of the opposing case from their own client (as may have been the case here).

291. Nonetheless, the key argument made on the appeal was a legal one, to which Prof. O' Connell's evidence is potentially relevant. Counsel argued that insufficient regard was paid in the High Court to the fact that certain of the sites are designated for the protection of habitat types under Annex I of that Habitats Directive and not just for the protection of species under Annex II of the same directive. When a site is designated for the protection of a habitat type, an appropriate assessment must include the assessment of all of the typical species of that habitat type and not just the species which are expressly listed for that site. It was not sufficient to conclude that bryophytes did not have to be surveyed simply because no bryophyte species were listed for protection, because, as counsel put it, that was to apply to an Annex II rationale to an Annex I question.

292. In making this argument counsel relied on the decision of the CJEU in *Holohan v An Bord Pleanála* (above). Again, in order to fully appreciate the significance of the court's ruling it may be useful to look at its synthesis of the questions which had been referred to it. In so far as relevant, this is set out at para. 32 of the judgment: -

> *"By its first three questions, which can be examined together, the referring court seeks, in essence, to ascertain whether Article 6(3) of the Habitats Directive must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue all the habitat types and species for which a site is protected and, on the other, identify and examine both the effects of the proposed project on the species present on the site, but for which the site has not been listed, and the effects on habitat types and species to be found outside the boundaries of that site"*

Having set out the basic jurisprudence regarding the need for there to be no reasonable scientific doubt as to the absence of adverse effects on the integrity of EU sites, the court

then looked at what was required in order for the integrity of the site not to be adversely affected stating at paras 35 and 38: -

> *"35. In order for the integrity of a site as a natural habitat not to be adversely affected for the purposes of the second sentence of Article 6(3) of the Habitats Directive, the site needs to be preserved at a favourable conservation status; this entails the lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site in the list of sites of Community importance, in accordance with that directive …*
>
> *38. It must also be added that, since the assessment must clearly demonstrate why the protected habitat types and species are not affected, it may be sufficient to establish, as observed by the Advocate General in point 30 of her Opinion, that only certain protected habitat types and species are present in the part of the protected area that is affected by the project and that the other protected habitat types and species present on the site are not liable to be affected."*

ICL place particular emphasis on this latter paragraph in circumstances which will be explained more fully below. Finally, the court answered the question in paras. 39 and 40, which are the paragraphs relied on by Ms. Hayes:-

> *"39. As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, it must be recalled that the Habitats Directive, as follows from the wording of Article 6(3) of that directive, subjects '[a]ny plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon' to the environmental protection mechanism of that provision. In that regard, as stated by the Advocate General in points 43 and 48 of*

her Opinion, the conservation objective pursued by the Habitats Directive, recalled in paragraph 35 of the present judgment, entails that typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area.

40. In the light of the foregoing, the answer to the first three questions is that Article 6(3) of the Habitats Directive must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for the habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site."

293. In this particular instance we are not concerned with the presence of protected species outside the boundaries of a designated site. Rather, the issue is the extent to which species which are not themselves designated but which are present on a designated site must be examined (these are referred to as "typical species" in the *Holohan* judgment). There is of course an anterior issue as to the extent to which a survey must be conducted of the designated site in order to ascertain the presence of species for which it is not designated or whether a developer can rely on the work done by the NPWS in the preparation of conservation objectives for a site in identifying the habitat types or species present at a given location (this point is addressed below at para. 306).

294. The appellant argues that *Holohan* requires an appropriate assessment to identify and examine the effects of the project on all typical habitats or species present on the site which, for the purposes for the argument, includes bryophytes although she has not actually provided any evidence to suggest that there are bryophytes present or present in a manner

which is connected to the constitutive characteristics of any part of any EU site likely to be affected by the development. Instead, in the absence of a bryophyte survey it is contended that their presence has not been excluded for the purposes of appropriate assessment. It was also argued that predicted concentrations for the deposition of ammonia are within a NORA guideline level for vegetation generally but exceed a stricter NORA guideline level for lichens and bryophytes. Again, it was contended that ICL could not rely on the general level without having done a survey to exclude the presence of relevant bryophytes.

295. The respondent and notice party on the other hand rely on the final clause of each of para. 39 and 40 of the *Holohan* judgment. In other words, they contend that an examination of species for which a site is not designated is only required *"if they are necessary to the conservation of the habitat types and species listed for the protected area"* and only in so far as the implications of the purposed projects for species present on the site but for which is has not been designated *"are liable to effect the conservation objectives of the site"*. Thus, the respondent and notice party argue that a bryophyte survey was not required because there is no evidence to suggest that there are bryophytes present on the designated sites which are necessary for the conservation of any habitat type of species for which the site has been designated. This is the argument which was accepted by the chairperson of the oral hearing and, by extension, the EPA.

296. As is often the case, there is some merit on both sides of the argument. Clearly, the designation of sites for the protection of particular habitats and species would make little sense if, once a site is designated, all habitats and species on the site had to be treated as if they were, to use the official terminology, qualifying interests for the sites concerned. However, as the appellant argues, the designation of a site for the protection of a habitat type necessarily requires a broader consideration of typical species present on the site than does the designation of a site for the protection of a particular species. Depending on the habitat

type, typical species may make an important contribution to the constitutive characteristics of the site concerned. Given the clear qualification by the CJEU of the more general proposition set out in paras. 39 and 40 of the *Holohan* judgment, this does not make it mandatory to include all undesignated but typical habitats and species in every appropriate assessment. The question is where the line should be drawn in identifying when an undesignated species present on the site becomes a typical species which is part of the constituent characteristics of the site connected to the protected habitat.

297. Where does that leave the argument in this case? As it happens no particular argument was made in respect of the SPA which is designated primarily for the protection of birds. Instead, the argument focused on the SAC which is designated, *inter alia*, for a number of different habitat types. No argument was made on behalf of Ms Hayes regarding the habitat types present on the site at the point where is it in close proximity to the installation. This may be significant as, according to the NPWS, the site is a large one running from Lough Derg in Co. Clare to an imaginary line between Kerry Head and Loop Head. Because the site is riverine, it is necessarily linear in nature. Further, no argument was made as to the presence or absence of bryophyte species in Bunlicky Pond which is the only part of either site referenced in the pleadings – and in fact it is only part of the SPA and not part of the SAC. Professor O'Connell in his affidavit identifies that the Lower River Shannon SAC contains a number of designated habitats three of which have bryophytes as an important component of their plant communities. These are water courses of plain to montane levels, molinia meadows and alluvial forests.

298. All parties took the court through the site conservation objectives for the SAC. The objectives regarding watercourses of plain to montane level identified three conservation elements (sub-types) in the site, the third of which is described as *"bryophyte-rich streams and rivers"*. The first two sub-types are associated with the tidal reaches of rivers whereas

according to the NPWS document *"the latter subtype is found in fast flowing stretches of unmodified streams and rivers"*.

299. Counsel for Ms Hayes contended that even where bryophytes are identified by the NPWS as being ecologically significant and made the target of specific conservation objectives at parts of the site, this does not take away from a more general obligation to survey the site to identify them elsewhere. The limit of this obligation was unclear – whether it related to the whole of the SAC or just that part adjacent to the licenced site and, assuming it applied to bryophytes, whether it also applied to other groups of flora or, if not, why not. To a large extent counsel for Ms Hayes relied on the obligation being on ICL to show and the decision maker to be satisfied that bryophytes would not be affected, which it was said could not be done in the absence of a bryophyte survey.

300. Counsel for the respondent and notice party brought the court through the more detailed description of bryophyte-rich streams and rivers including the note that this habitat was found *"in mature river stretches of 10-12m, occasionally up to 20m wide, which varied from riffles and cascades to pools"*. The court was also brought to a map of the Lower River Shannon SAC which shows that the area of the SAC identified as including this habitat type is upstream of the development site and distant from it by about 23 kilometres (*i.e.*, well outside the zone of influence). As regards alluvial forests, the conservation objective targets particular trees because they form an important habitat, *inter alia*, for bryophytes. In relation to another of the listed habitat types for this SAC, molinia meadows, it was pointed out that the presence of sphagnum and hair mosses (all bryophytes) is actually a negative indicator and the conservation objective is to keep them below a certain level. In summary it was contended that for the duty to assess non-designated or typical species under *Holohan* to apply, there must be a nexus established between the species which is not designated and the conservation objectives for the site. This, it was contended, Ms Hayes had failed to do.

301. I accept that Ms Hayes has not established that nexus – in reality she has not even attempted to establish it. Instead she has relied on the importance of bryophytes generally and their sensitivity to air pollution. Her case shifted from suggesting that they had to be surveyed in any event in order to establish their presence (or absence) to suggesting that a survey was required because bryophyte rich streams are identified as a sub-type of the water courses of plains to montane level habitat type (albeit at a location some remove from the installation). No information was put before the court to suggest either that bryophytes are present in the SAC in the vicinity of the installation nor that, if present, they form a constituent characteristic of the protected habitat type (which, at this location, was not identified either).

302. In considering this issue I have taken Ms Hayes' case at its height even though as expressed in argument this was materially different to the case as pleaded by her. As discussed above, I have also considered Professor O'Connell's affidavit to the extent that it relates either to bryophytes generally or specifically to the Lower River Shannon SAC but subject to the reservations set out at paragraphs 288 – 290 above. In circumstances where an unresolved objection was made at trial it is unclear whether this evidence was considered by the High Court.

303. The starting point for any analysis of whether a bryophyte survey was required must be that bryophytes themselves are not listed as a qualifying interest for the SAC. Insofar as they are identified as an important element of a sub-type of a protected habitat in the SAC, that habitat sub-type is identified by the NPWS as being located some 23 kilometres distant from the development site. This does not preclude the possibility that bryophytes might constitute a typical species present elsewhere on the SAC. However, even if that were the case, the obligation to specifically address them as part of an appropriate assessment is dependent on their being necessary to the conservation of the habitat types or species listed

for the protected area and not merely on their being a typical species present on it. Thus, in order for an AA to be defective by reason of the failure to assess an undesignated species, there must be a nexus between that species and the implications of the proposed development for the conservation objectives of the site. The fact that bryophytes are particularly sensitive to atmospheric pollution and may therefore serve as a useful "indicator" species does not in and of itself establish the necessary nexus.

304. Ms Hayes' argument is predicated on an assumption that ICL had an obligation to survey the protected site for bryophytes so as to exclude their presence thereby enabling the EPA to be satisfied that the proposed development will not have an adverse effect on them. With respect, nothing in *Holohan* suggests that such an obligation exists. If it did, it would require not only a survey to exclude the presence of bryophytes but presumably also that the presence of a range of other undesignated Annex II species be excluded. Arguably, the non-presence of all of these species would have to be established for all of the sites in the zone of influence of the proposed development. Although the pleaded argument is more limited in that only two sites are referred to, if the proposition were sound it would follow that the contended for obligation would apply to all relevant sites. Even accepting, as I do, that the obligations on both a developer and a decision maker under the Habitats Directive are onerous, this seems to go far beyond what might be considered "appropriate".

305. I also do not accept that the obligations on ICL and the EPA were extended to include a bryophyte survey merely because the appellant raised the issue in her submissions to the EPA and at the oral hearing. As noted above, her submission on this point was general in nature and focused on the usefulness of such a survey given that bryophytes can serve as an indicator species. She did not make any case as regards the presence of bryophytes on any part of the SCA much less a case that their presence there was essential to the constitutive characteristics of the site (or that part of it) and necessary for the conservation of the habitat

types and species listed for the protected area. The case she made before the EPA was unsupported by any expert evidence.

306. Further, much valuable work has been done by the NPWS in preparing detailed site conservation objectives for protected sites which include a detailed analysis of the habitat types and species to be found on the sites for which they are listed and, in the case of habitat types, where those habitat types are located. Whilst this does not remove the respective obligations on the developer in its NIS and the decision maker in its AA to expressly examine, analyse and evaluate in a detailed and concrete way the potential effects of the proposed development on an EU site, it does provide the starting point from which that analysis should be conducted. Given the role of the State under the Habitats Directive in submitting sites for designation and the responsibility of the State (through the NPWS) for the preparation of conservation objectives for sites once designated, a decision maker must be entitled to place significant reliance on the work done by the NPWS in this regard. In this case the site conservation objectives on which reliance was placed in the NIS do not suggest that bryophytes are a relevant species for any habitat type in the vicinity of the proposed development.

307. I am also conscious that this is a case in which the EPA was particularly live to its obligations under the Habitats Directive. It will be recalled that neither of the planning decision makers required the submission of an NIS in the course of the planning process for the related infrastructure and that the application as originally submitted by ICL included an AA screening report which suggested that an AA would not be required. The EPA engaged an independent consultant to review the screening report and accepted its advice that an NIS should be requested and an AA carried out. Following the submission of an NIS, it reverted to ICL seeking further information in relation to a number of issues impacting on that AA,

most particularly for present purposes issues relating to the air emissions analysis and the predicted impact on vegetation of the emission of pollutants.

308. The NIS submitted to the EPA expressly identified communities rich in bryophytes as being amongst those most at risk from nitrogen eutrophication. Therefore, the sensitivities of this group of species and their potential as an "indicator" species was clearly flagged by ICL and appreciated by the EPA. However, the analysis showed that the worst-case values (predicted at the boundary of the cement plant within the overall ICL site) met, and in most cases comfortably met, all relevant standards for the protection of vegetation. Levels of pollution at the nearest ecologically sensitive sites (i.e., the SAC which is in part contiguous with the ICL site boundary and the SPA which overlaps with the ICL site at Bunlickey Pond) were, because of the distance, expected to be even lower.

309. In all of these circumstances I am of the view that Ms Hayes has not discharged the onus on her in this litigation to show that it was necessary for a bryophyte survey to be carried out in order for the AA undertaken by the EPA to be valid. During the course of any assessment, the extent to which such a survey was necessary would normally be informed by the expertise of the EPA as the responsible decision maker. Whilst it is always possible that a decision maker might err in not seeking information on a particular aspect of an assessment, the burden lies on an applicant to establish that the absent survey was a necessary element of a valid AA. In saying this I am conscious that the primary onus is on the EPA to ensure that it conducts a complete AA which is capable of removing all scientific doubt as to the absence of adverse effects on the integrity of a site and that this is a pre-condition to its jurisdiction to grant the revised licence. A litigant seeking to establish that an AA was incomplete does not bear the onus of showing that the proposed development would have an adverse effect on the integrity of a site much less what the suggested survey might have shown. However, in circumstances where bryophytes are not a designated species for the

SAC, there was a basic onus on the appellant to show that the survey, the absence of which she contends invalidated the AA, was necessary for the assessment carried out to be a complete one. The submissions made by her – both to the EPA and indeed in the litigation - were at a high level of generality and did not establish, or even attempt to establish, a nexus between the possible presence of bryophytes in the SAC at this location and the constitutive characteristics of the site or their potential relevance to the conservation objectives of the site.

310. I also affirm the decision of the High Court on this issue and reject this ground of appeal.

Conclusions:

311. It will be apparent from the preceding sections of this judgment that I am dismissing both of these appeals and affirming the order of the High Court for the reasons stated.

312. These appeals are covered by the special statutory costs rules relating to environmental cases under which an order for costs is not normally made against an unsuccessful applicant. Those rules extend to cover this appeal from the original High Court decision. Consequently, in the circumstances I would propose that no order for costs be made against either appellant.

313. This judgment has been read in advance of its delivery by my colleagues Ní Raifeartaigh J. and Meenan J. both of whom have indicated that they are in agreement with its contents and with the orders proposed.