

Notes on Court of Appeal Judgment

Abbreviations

IED - Industrial Emissions Directive

DD - Decision Document

EA - Environment Agency

IBA - Incinerator Bottom Ash

IBAA - Incinerator Bottom Ash Aggregate

Intro

The EA prove that they are aware of the requirement under the IED for greater protection for water than air with their wording in various places in the DD and Permit of 'shall not cause pollution' and 'uncontaminated water only'.

However the execution of the permit does not allow for these declarations to be tested in practice and further does not make it clear what is actually required of Covanta to adhere to the permit conditions.

The points where the permit is inadequate are:

- a) Under the point source emissions to water table the EA has not required monitoring of the discharge and has not specified any frequency of monitoring. There is also no way of reverting back to the minimums required by the IED as the minimum of every 5 years is only for groundwater.
- b) Under the operating techniques incorporated in table S1.2 in the permit - one of these conditions mentions that the discharge will be tested periodically and one of the other conditions states that there is no requirement to undertake testing.
- c) Under condition 3.1 - it is stated because the water emissions are not subject to emission levels that even if by chance pollution is found to have taken place - the EA has no powers to fine, demand changes or any other interference as long as Covanta say that all the other operating techniques have occurred. We have already established that the other techniques will not ensure prevention of dissolved heavy metals being included in the surface water discharge

Main Points

The IED's Intention

It is clear the IED's intention is to place a further amount of protection on water and soil pollution than on emissions into the air - by the wording of articles 1 and 46.5

"Article 1 - It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole

Article 46.5 - Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and operated in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater"

The current permit as it stands allows for situations that will work in direct opposition to the IED intent. The EA relies on the written declarations that 'shall not cause pollution' and 'only uncontaminated water allowed' - with no way of testing and therefore enforcing these statements.

Table S1.2 in the permit allows the EA to ensure that a defined regime for the testing of the water discharge is legally binding - but they have chosen not to use this and make it clear in the DD several times that they feel monitoring is not required.

Covanta's own justification of meeting Article 46.5 is Supporting Information Document 2.4.4 entitled 'Contaminated Water' - which discusses spills and accidents not fugitive emissions from dust from 400 tonnes of ash a day - on a day in day out basis for up to 40 years.

Practicable against Prevent

The Judge would appear to agree that condition 3.2.1 should require the prohibition of pollution but then qualifies this with "unless there are not practicable measures" to prevent then it's OK to minimise. He also goes on to say that If prevention is capable of being achieved - it must be achieved. (judgment para 69). The IED gives us no specific alternative meaning of the word practicable as used in the text several times. Therefore I would guess the generally accepted meaning of 'being able to be done' should be applied. The surface water is collected in the attenuation pond prior to discharge and our Expert Witness provided insight into a method that would achieve treatment of the water to chemically turn the dissolved heavy metals back into solids - so that silt interceptors would be capable of capturing them. Therefore - it is practicable to prevent the heavy metals moving onwards to Stewartby Lake.

The EA's Powers and ability to Enforce

Throughout the judgment speaks of the EA's powers and enforcement- what seems to have been missed is that - in this particular issue of pollution of the surface water the EA has actually taken away its own powers.

Condition 3.2.1 on the permit means that even if by chance (because Covanta are not obligated to test) pollution is found - the EA permit in its current form states that Covanta will not have breached their permit as long as they have followed all the accepted procedures - including the use of the interceptors (that is accepted will not be able to intercept dissolved heavy metals).

This will be true regardless of the levels of pollution found. The EA will not be able to fine or otherwise effect Covanta's site based on any pollution found in the surface water discharge.

The EA's Acceptance of paragraph 2.4.5

The judges agree with the High Court that they do not accept that the EA accepted the paragraph re dissolving heavy metals in 2.4.5 which they then incorporated into the permit under table S1.2 - however at the very beginning of the Decision Document it states-

"This is a decision document, which accompanies a permit.

It explains how we have considered the Applicant's Application, and why we have included the specific conditions in the permit. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. **Unless the document explains otherwise, we have accepted the Applicant's proposals.** We try to explain our decision as accurately, comprehensively and plainly as possible."

The use of the interceptors to capture fugitive heavy metals from entering the surface water system is

surely a proposal by Covanta the Applicant. The EA fail to mention that there is anything wrong with this proposal in the Decision Document despite having 220 pages - including a direct question by our expert witness - to do so.

What are the Operating Techniques incorporated into the Permit at 2.4.5?

The appeal Judge agrees with the High Court that the fact that heavy metals dissolve in water is not an operating technique - however - this is the wrong way to look at this. If we are to take Article 46.5 wording of "Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and **operated in such a way as to prevent** the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater" and if it is understood that the operating of the waste plant creates IBA the dust of which is highly fugitive - then 2.4.5 is given more context.

Covanta's Supporting Information Document forms part of the application documents and the author has put forward techniques that will be used in order to address various issues that occur during the operation of the plant. The paragraph puts forward the proposal that silt interceptors will ensure that solids are captured before entering the surface water drainage system - it then goes on to describe the nature of the heavy metals in the IBA - and proposes that these will also be captured by the interceptors. An operating technique does not stand on its own - it needs to be used in order to create the desired result - and in this case it was given the narrative that not only would it capture silt etc but also heavy metals from the fugitive emissions from the IBA because they would remain solid.

The other techniques described in paragraph 2.4.5 are all dependent on human intervention and human response time. All the other techniques also do not guarantee the prevention of pollution into surface water during the operation of the plant with produces the by product of IBA every single day.

Has the monitoring of the surface water discharge been indirectly incorporated into the Permit?

2.3.1 of the Supporting Information Document does appear under the table S1.2 Operating Techniques which states ""The discharge from the interceptors will be tested periodically to verify that it is not contaminated. The drainage system, interceptor and penstock valve will be subject to a planned maintenance regime." but 2.5 has also been incorporated in its entirety which states under 2.5.3 "Monitoring emissions to water - As discussed in Section 2.4.3, there will be no process emissions to water and the only emissions to water will be of uncontaminated rainwater. Therefore, there will be no requirement to undertake monitoring of emissions to water."

The definition of what would constitute periodic testing (as far as I can see) is actually only used in relation to water for groundwater in the IED - where it states in Article 16 "...periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination."

Even if we accept the indirect incorporation of the operating technique of periodic testing of the surface water discharge in table S1.2 under 2.3.1 -a) without any indication of the requirement of frequency of testing at table S3.2 - the frequency could be say every 40 years - because it is not even covered by the IED's periodic testing of at least every 5 years as it is surface water discharge not groundwater and b) it has been contradicted by the incorporation of 2.5.3 in the permit.

Judgment Paragraphs - Observations in more Detail

55 - "...and monitoring (subsection 2.5)." - [Supporting Information Document] this refers to monitoring of the emissions to air not water

59 - rather than prove that the EA must have known about the problem with the sentence and the ability of the interceptors - the fact that the EA did not even answer our Expert Witness's question pointed out the mistake during the public consultation - shows the opposite - otherwise why not use that chance to clear up the science at that time

61 - "...and bearing in mind that a breach of a permit condition can lead to criminal sanction" - will not in this instance as no monitoring (or frequency) required by the permit and as the permit does not enforce any emission levels for surface water the following condition of the permit would come into effect in the unlikely event that any monitoring actually happens and pollution is found -at whatever levels - condition 3.2.1 of the permit states "Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions."

The only pollution path that I can see which does not have any emission levels defined is the surface water discharge. Therefore 3.2.1 of the permit can be seen to be in direct conflict with Article 46.5 of the IED as the prohibitive of prevent has been diluted into 'where not practicable, to minimise' at the EA's request.

66 - disagree that the paragraphs in 2.4.5 are not referring to an operating technique. The paragraph sets out a problem that needs solving - controlling the fugitive emissions from IBA storage. Then a number of techniques are proposed in order to achieve the desired result. I believe the reason that it is specifically pointed out that IBA that contains heavy metals is due to their effect on human and environmental health even in small quantities. The author of the document then goes on to qualify why the proposed operating technique of using the interceptors on the surface water system is all encompassing because they will also capture the heavy metals which are significant pollutants.

68 - Again - as there is no legal obligation for Covanta to monitor/test the water discharge in the attenuation pond under any defined frequency - a) contaminated water is unlikely to come to light b) even if it does under permit condition 3.2.1 as long as Covanta has: done all the operating techniques - spill kits, interceptors etc they will not have breached the permit. Again this approach in the permit has only protected the water emissions in words only - not actual operation over up to 40 years. Just because the permit declares "shall not cause pollution" and "uncontaminated water only" - without an requirement to test and monitor that discharge and then a way to enforce any penalties if pollution is found - these declarations are not worth the paper they are written on.

69 - "The effect of the qualification is to prohibit polluting emissions unless there are no practicable measures by which they can be prevented or, failing that, minimized. This effectively compels the operator to do all that practically can be done in the design and operation of the facility to prevent such emissions. If their prevention is capable of being achieved, it must be achieved. Minimization would not be enough" . The word practicable - usually means 'being able to be done' - and the IED has not provided any alternative more specific definition. We know that the design has allowed for the surface water to be collected on site in the attenuation pond before being discharged (probably more for fire water than anything else) - but this allows for the opportunity for the discharge to be regularly monitored/tested and if necessary treated before onward discharge into the environment. Our Expert

Witness provided insight into a method that would achieve treatment to chemically turn the dissolved heavy metals back into solids - so that silt interceptors would be capable of capturing them. Therefore - it is practicable to prevent the heavy metals moving onwards to Stewartby Lake.

70 "When, as here, the description of a particular operating technique in the supporting information document confirms both that it is practicable and that it will be effective in preventing – rather than merely minimizing – polluting emissions..." - this makes no sense at all - and it is like he is talking about a totally different case. The description of the operating technique in the Supporting information document at 2.4.5 includes the erroneous science that the heavy metals will not dissolve and therefore will be capable of being captured by the silt interceptors confirms that that particular function of the interceptors is in fact not practicable and totally ineffective and will not prevent polluting emissions. Everyone has confirmed that the interceptors will not be able to prevent the dissolved heavy metals being discharged.

"the operator cannot realistically claim to have complied with condition 3.2.1 unless the prevention of pollution is actually achieved" - again how will it be proved that the prevention of pollution has been achieved - if there is no requirement in the permit for monitoring/testing of any practical or defined frequency.

The judge refers to "described in paragraphs 2.4.3, 2.4.4, 2.4.5 and 2.5.3 of the supporting information document – where practicable measures for the prevention of polluting emissions are described in detail." These paragraphs include reference's to a) accidents not day to day fugitive emissions and b) at 2.5.3 Covanta confirm that they see no need for monitoring of emissions to water "As discussed in Section 2.4.3, there will be no process emissions to water and the only emissions to water will be of uncontaminated rainwater. Therefore, there will be no requirement to undertake monitoring of emissions to water."

73. At the very beginning of the DD it states

"This is a decision document, which accompanies a permit.

It explains how we have considered the Applicant's Application, and why we have included the specific conditions in the permit. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. Unless the document explains otherwise, we have accepted the Applicant's proposals."

The proposals included the Supporting Information Document and the paragraph 2.4.5 - no 'explaining otherwise' is included in the DD or permit.

76. "None of this betrays any misunderstanding by the Environment Agency of the properties of heavy metal salts present in IBA, or of the measures Covanta would use to ensure there would be no pollution from this source, and no contamination of the surface water draining to the Low Level Restoration Scheme and to Stewartby Lake." - what good are measures if you are not required to measure/test if they are capable of the IED's requirement of preventing pollution to water.

78 - "It responded directly to the comments made by Professor Ramsden about the erroneous statement in paragraph 2.4.5 of the supporting information document that heavy metal salts in the IBA "would not be expected to dissolve", and his concern that the proposed "silt traps will not prevent the release of [dissolved] metal salts in ash water run-off." - the EA did not respond to the question put before them - they merely deflected and talked about the process IBA water - not the surface water system. It certainly did not confirm that "The point made in Professor Ramsden's representations was noted and dealt with" otherwise why was there no indication anywhere that they were aware that the paragraph in 2.4.5 was wrong. The Judge is mistaken that the query from our Expert Witness was concerning the IBA water run-off and separate water system - the reference to the interceptor intercepting dissolved heavy metals only appears when qualifying how fugitive emissions from IBA to water will be dealt with - not known

emissions through the process of turning IBA into IBAA.

80. - Again the statement at the beginning of the DD is "This is a decision document, which accompanies a permit. It explains how we have considered the Applicant's Application, and why we have included the specific conditions in the permit. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. Unless the document explains otherwise, we have accepted the Applicant's proposals. We try to explain our decision as accurately, comprehensively and plainly as possible."

81 "...including the fact that heavy metals in the IBA would be soluble in water, and its conclusion that contaminated process water would be successfully contained in a sealed system and pollution to surface water prevented." - The Judge seems to have gone off course here and is qualifying the prevention pollution to the surface water simply by the fact the IBA process water will be dealt with within a different system. This is not the point - the process water from the IBA into IBAA process is accepted to be polluted and there is no emission point for its discharge in the permit. The point about the surface water was the inevitable fugitive emissions from IBA dust from the handling of the 400 tonnes of ash - dealt with on a daily basis for up to 40 years - discharging into a sensitive water receptor.

87 "Judging the likely polluting effects of a waste incineration plant, and the reliability of the operating techniques designed to prevent such pollution, is a familiar task for it, which calls for that expertise to be used" - the paragraph in 2.4.5 states that Covanta did believe that the interceptors are designed to prevent the dissolved heavy metals present in fugitive IBA emissions. The Supporting Information Document formed part of the application documents that the public was asked to consult on. It makes a mockery of the whole public consultation process if then the court deems that it doesn't actually matter what is in the application documents. The EA never addresses this point despite 2 separate schedule 5 occasions and a 220 page Decision Document.

"The contemporaneous documents speak for themselves. As they show, the Environment Agency's decision was not impaired by any error of fact or science" - what the documents actually show is that a) the EA accepted the Applicant proposals without questioning or otherwise indicating that there was anything wrong with 2.4.5 and b) that the EA has completely restricted its powers to monitor let alone - if necessary - enforce any measures regarding pollution via the surface water system.

92 Re interceptors not the only measure etc quotes the Supporting Information Document "...which, together with the interceptors and penstock valve, would be regularly maintained, and the discharge from the interceptors would be tested (paragraph 2.3.1)." -again the testing of the discharge has not been required by Covanta in the Permit (at table S3.2) and this statement is in the same application documentation that we are not supposed to give any weight to at 2.4.5 regarding the heavy metals not dissolving - but apparently are supposed to give weight to in regard to the testing of the discharge.

To say that the use of the interceptors to capture dissolved heavy metals (in addition to suspended solids) is not an operating technique incorporated into the permit at table S1.2 - but to say that the periodic testing of the discharge water is a viable operating technique incorporated into the permit at table S1.2 for ensuring the absolute of preventing pollution to water is a stretch indeed.

The word definition of what constitutes periodic testing - as far as I can see is actually only used in relation to water for groundwater in the IED - where it states in Article 16 "The frequency of the periodic monitoring referred to in Article 14(1)(e) shall be determined by the competent authority in a permit for each individual installation or in general binding rules." and "Without prejudice to the first subparagraph, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination."

So technically - even if we accept the indirect incorporation of the operating technique of periodic testing of the surface water discharge in table S1.2 under 2.3.1 "The discharge from the interceptors will be tested periodically to verify that it is not contaminated. The drainage system, interceptor and penstock valve will be subject to a planned maintenance regime."

- without any indication of the requirement of frequency of testing at table S3.2 - the frequency could be say every 40 years - because it is not even covered by the IED's periodic testing of at least every 5 years as it is surface water discharge not groundwater.

Also in table S1.2 - 2.5 appears to be incorporated in its entirety which includes 2.5.3 - but this states "Monitoring emissions to water - As discussed in Section 2.4.3, there will be no process emissions to water and the only emissions to water will be of uncontaminated rainwater. Therefore, there will be no requirement to undertake monitoring of emissions to water" - which is the direct opposite of 2.3.1 which claims it will be testing periodically.

So in this regard the EA have incorporated two separate operating techniques into the permit that actually contradict each other. The EA's own EPR guidance contains the following - "7.9 All permit conditions should be both necessary and enforceable. 'Necessary' means that the regulator should be able to justify at appeal if necessary the permit conditions it attaches. To be enforceable, conditions should clearly state the objective, standard or desired outcome of the condition so that the operator can understand what is required. Subject to legal requirements, duplication with the requirements of other legislation should be avoided."

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/211852/pb13897-ep-core-guidance-130220.pdf - how can it be clear to Covanta what the requirement for monitoring the water discharge is when they have incorporated both and also the DD contradicts itself on this point as well.

94 states "And in the relevant parts of the decision document it applied the obligations as strictly as the language of the provision requires – considering all the measures by which “the ... release of ... polluting substances into soil, surface water and groundwater” would be prevented, not merely those provided for in the dust management plan. For the reasons given in the decision document, it was obviously satisfied that the proposed arrangements in their entirety would prevent the harm to which article 46(5) is directed." - as evidenced by our Barrister - the decision document is littered with references to minimizing rather than preventing as suggested here.

95 "[The EA] satisfied itself that the proposed measures corresponded to Best Available Techniques, were practicable, and could be made the subject of enforceable conditions in the environmental permit" - it is not the only practicable measures available and is not subject to enforceable conditions because of all condition 3.2.1 in the permit

101 Strangely while discussing the precautionary principle the judge also speaks of the revision of the permit "if activities should give rise to pollution" - again under the current permit - no requirement to monitor or test water discharge with any defined frequency - how will it be known that activities are giving rise to pollution? - and how does that 'lets wait until there is pollution' fit into the precautionary principle?

Conclusion

It is clear that the EA are currently coming under a lot more scrutiny as people become more aware of pollution and the role the EA has in regulating the worst polluters in the country.

The Rookery Pit Incinerator is one the largest currently proposed for the country and it also happens to be well inland and next to a sensitive body of water and system that is ultimately used for drinking water.

The longevity of the plant and the amounts of ash handling that will be needed each year - make it much more important to ensure the EA are permitting correctly.

It may be that the EA have permitted in this way for some time and therefore do not see anything wrong with this - but I do not think that they have ever been tested on this point of water pollution in the past. With the vast amounts of potential for pollution coming from the stacks in large Incinerators - everybody has been concentrating their efforts on looking at these emissions to air and ignoring other emissions.

What we have ended up with is that both the permit and the DD are very confused on the matter of - first what is required regarding monitoring/testing of the water discharge- and then how - without defining the monitoring/testing - is the plant going to achieve/prove the prevent requirement under the IED 46.5?