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## **Guidance on financial guarantees for mining waste facilities**

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This guidance has been produced by the Environment Agency for the following purposes:

- for operators preparing financial guarantee proposals upon application and upon review
- for Environment Agency staff when assessing operators' proposals, and
- to be made publicly available to inform other interested stakeholders

### **Summary of Key Principles:**

*These summarise the key elements of the guidance but should not be relied upon without reference to the appropriate section for the detail.*

1. Financial guarantees are required to ensure that the obligations arising from a permit are fulfilled.
2. Any provision has to be sufficient in monetary terms, secure and available when required.
3. We will normally require a detailed estimate of aftercare costs for Category A mining waste facilities and facilities for hazardous waste sites for a period of 60 years.
4. All aftercare costs will include a contingency sum that will remain after the period covered by detailed costings in case additional expenditure is required.
5. Amounts of financial guarantees will be calculated based on third party costs and a contingency element.

## 1.0 Aims and Objectives

- 1.1 Financial guarantees aim to protect the environment and human health by ensuring that funds are available to rehabilitate land affected by a Mining Waste facility and to provide for aftercare of the facility once it is closed.
- 1.2 The objective is to ensure that all of the obligations of a permit for a Mining Waste facility ('an environmental permit') are met. The financial guarantee could be in a form that provides funding to the original operator to discharge these obligations, or it could be in a form that means funds are accessible to a subsequent operator, or a person appointed by the Regulator, to meet the obligations.
- 1.3 To achieve these aims and objectives the financial guarantee has to be *sufficient* to meet the costs, *secure* for as long as obligations and the environmental permit persist, and *available* to the right person when the funds need to be accessed.
- 1.4 Article 3 of Directive 2006/21/EC on the management of waste from extractive industries (the Directive) recognises that financial guarantees may not be necessary for all mining waste facilities. In England and Wales the available derogations have been taken up so that financial guarantees are only required for Category A mining waste facilities and facilities for hazardous waste.

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## 2.0 Legal Background

- 2.1 Article 14 of the Directive 2006/21/EC sets out the requirement for financial guarantees. This requirement is described in Technical Guidelines prepared by the European Commission available at [\(link\)](#).
- 2.2 The Environmental Permitting (England and Wales) Regulations 2007 will be amended to require that financial provision is made for mining waste facilities in England and Wales.
- 2.3 This Guidance takes account of the above legislation and guidelines.

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## 3.0 Scope of this Guidance

- 3.1 This guidance only applies to Category A mining waste facilities and facilities for hazardous waste. We will classify a mining waste facility as Category A where:
  - A failure or mistake at the mining waste facility has the potential to cause a major accident;
  - the mining waste facility contains hazardous waste above a certain threshold; or
  - the mining waste facility contains dangerous substances above a certain threshold.

The Commission are providing further guidance to determine the criteria for the classification of extractive waste facilities including the thresholds for a Category A facility.

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#### 4.0 'Sufficient' Provision - Calculation of the Financial Guarantee

4.1 A waste management plan must be prepared by the applicant for an environmental permit for all mining waste operations. A permit will require the operator to follow this plan. The plan must cover the following elements, where they are relevant:

- the proposed classification of the mining waste facility;
- waste characterisation in accordance with Annex II to the Directive, and an estimate of the total quantity of mining waste to be generated;
- a description of the operation generating the waste;
- a description of any treatment of the generated waste;
- a description of the risks to the environment and human health;
- a description of the preventative measures to be taken to minimise environmental impact over the life cycle of the facility including location, construction, closure and aftercare;
- the control and monitoring procedures including for the waste and extraction void where the waste is being returned to the void and for the mining waste facility;
- the proposed plan for closure, after care and monitoring;
- measures for the prevention of the worsening of water status in accordance with the Water Framework Directive and for the prevention and minimisation of soil and air pollution; and
- a survey of the land to be affected by the mining waste facility.

4.2 The costs associated with the above elements can be estimated. As these fall at different times in the proposed plan for the lifespan of the site they can be plotted as an anticipated expenditure profile covering operational, closure and post-closure phases. The cumulative cost of this expenditure profile represents the liability that should be covered by the financial guarantee.

4.3 Some obligations will need to be complied with during 'Closure' of the site and prior to the commencement of 'aftercare'. This may include capping the waste and installation of the drainage layer and protection of the cap. Provision should be made to discharge these obligations, taking account of the risk of early cessation of operations and premature closure.

4.4 The applicant should assess the duration of the aftercare period while preparing the application (for example by modelling). This can have a significant bearing on the total liabilities to be covered by guarantee.

4.5 We consider that it is appropriate to estimate detailed costs for an aftercare period of 60 years, with a further contingency fund available thereafter. This is a reasonable period over which we might expect an operator to have to maintain operational controls over the site. It also represents a period over which costs can be determined with a reasonable degree of accuracy and after which detailed costings become less and less meaningful. Shorter periods may be agreed where the operator has provided a mechanism for the rapid stabilisation of the waste mass which we have approved.

- 4.6 Irrespective of the time estimated for aftercare, the calculation must include a 'contingency' sum. This is to ensure that once the period estimated for managed aftercare is over, there are funds available should continued management be necessary. If managed aftercare is unnecessary at the end of the period the permit could be surrendered and the residual amount released.

### ***Inflation and discounting***

- 4.7 *Inflation.* Provision is calculated in 'today pounds' (the value at today's prices). No account is taken of the inflation rate at the time the provision is calculated. The financial guarantees will be reviewed regularly to take account of inflation as defined in the performance agreement
- 4.8 *Discounting.* Discounting future expenditure to net present values is not normally appropriate. Only in those circumstances where there is a consistent and proven real rate of return on the funds (which does not compromise their security or availability), after a realistic assessment of the effect of inflation, will the Agency consider proposals for discounting.

### ***Calculating the sum***

- 4.9 When we receive a proposal, we will consider the detailed costs under the headings in the Waste Management Plan. Each heading will have a series of individual expense types. The operator shall calculate the value of the financial guarantee on the basis:
- of the likely environmental impact, taking into account in particular the characteristics of the waste and the future land use; and
  - that an appropriate third party will assess and carry out the necessary work.
- 4.10 We must confirm that the costs of the obligations arising from the permit are covered. We may therefore require from the applicant an explanation of the assumptions made and evidence for the accuracy of the prices used.
- 4.11 As the operator is making provision for any future expenditures, we need to agree a 'cost profile'<sup>1</sup>, not just the numbers.

### ***Specified Events***

- 4.12 An assessment of risks to the environment will form part of the waste management plan. These will have identified the hazards and potential risks associated with a particular site. The assessments should include an estimate of the size of the hazard and the potential impact on the environment should control measures fail, taking into account the likelihood of their occurrence. An evaluation will also have been made of the significance of each hazard on the 'receptors' identified.
- 4.13 Where a permit requires environmental control measures it will be necessary for the operator to provide financial guarantee for failure, maintenance or repair of the relevant infrastructure, depending on the likelihood of the occurrence.
- 4.14 Provision will only be required for justified and definable specified events. These will need to be agreed with the operator early on in the application process. No

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<sup>1</sup> Cost profile – Pattern of costs which builds during the operational phase of the site to a maximum at site closure, when risk is likely to be highest. Costs then drop as the fund is spent on aftercare.

attempt should be made to cover potential third party claims arising as a result of pollution incidents.

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## **5.0 Security - Mechanisms to provide a financial guarantee**

- 5.1 We do not dictate how an operator should provide a financial guarantee. We will consider any mechanism that meets the following objectives:
- i) the amount is sufficient to cover the obligations of the permit;
  - ii) the mechanism is secure for the duration of the permit; and
  - iii) that the money is available when required.
- 5.2 The intention is that the source of funding is secure for the duration of the permit so that funds are available to discharge the obligations of the permit. This includes consideration of any financial risk in relation to the mechanism chosen and ensuring that the funds cannot be diverted for any other purpose.
- 5.3 The fund provided must be kept under review if it builds up gradually to reflect gradually increasing liabilities. We would not expect our 'exposure liability' (any gap between the amount provided and the liability at any point in time) to exceed £100,000 or 10% of the total financial guarantee (whichever is the lower).

### ***Guarantee Mechanisms***

- 5.4 The following are key mechanisms that we will accept for demonstrating a financial guarantee:
- Bonds and Renewable bonds
  - Escrows
  - Cash
  - Trust Based Investment Portfolios
- 5.5 We have considered and will not accept mechanisms that do not provide adequate financial guarantee in a robust form. In particular the following mechanisms on their own do not offer adequate security that funds will be available when required;
- Provision in accounts
  - Parent company guarantees
  - Overdrafts
  - Annually renewed insurance

More detail is provided in [Appendix 1](#)

### ***Additional mechanisms for providing a financial guarantee***

- 5.6 We remain open to proposals from operators as to how they will make provision. *In particular, we would welcome proposals for Industry-wide schemes to guarantee against liabilities, or for Group schemes which consolidate liabilities at a number of sites under 'umbrella agreements'.* In any proposal an operator should provide;
- i. A general description of the 'financial guarantee' and how it works

- ii. Demonstration of the *sufficiency* of the funds (see section 4)
- iii. Demonstration of the *security* of the funds, particularly any financial risk associated with the mechanism and details of how the funds are protected from misuse
- iv. Demonstration of the *availability* of the funds, how and when the operator will access funds and any constraints on that access (particularly concerning premature or delayed closure).
- v. Explanation of how inflation / discounting or tax implications have been addressed,
- vi. Explanation of any other financial risk associated with the mechanism (such as the financial strength of any parties involved) and how these have been addressed.

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## **6.0 Availability - Use of funds/ call-down of funds**

- 6.1 There should be no obstacle that would prevent an operator from appropriately accessing the funds to discharge the obligations of the permit at the relevant time. The rules of access to those funds would be set out in a legal agreement between the operator and us. The mechanism should be sufficiently flexible to allow appropriate access to funds should there be premature or delayed closure of the mining waste facility.
- 6.2 It is envisaged that operators will normally access financial guarantee funds in arrears and in accordance with the agreed 'cost profile', to assist them to meet the obligations of the permit. Operators will undertake the works set out in a particular year of aftercare and will reclaim that expenditure from the 'aftercare fund'.
- 6.3 A guarantee may provide funds to an operator where that operator is unable or unwilling to fund the required works from its ongoing activities. A bond which is payable to the operator could take this form. A performance agreement with the Regulator would set out under what circumstances a bondsman would pay-out the funds. As we would pursue enforcement action where the obligations of a permit were not being discharged, pay-out could be triggered by the service of an enforcement notice or by a High Court injunction. Subsequent access to the funds would be subject to the terms of the performance agreement.
- 6.4 Some FP mechanisms may be short-term products that are agreed on a 'rolling-renewal' basis, such as renewable bonds. Where products are not renewed within the set renewal period this too would act as a trigger for pay-out. The funds would then be available and held ready for use. Subsequent access to the funds would be subject to the terms of performance agreements with us.

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## **7.0 The Assessment Process**

- 7.1 Applicants should be advised during pre-application discussions and during the determination process, as to the existing mechanisms available to demonstrate that they can provide a financial guarantee to satisfy the obligations of the permit.
- 7.2 On receipt of an application a summary of the process is as shown in the flow chart in [Figure 1](#).

7.3 We must ensure that the financial guarantee is in place before any deposit (or accumulation) of mining waste in the facility.

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## 8.0 Review of the Financial Guarantee

8.1 The financial guarantee should be reviewed every 5 years, or more frequently to tie in with any substantial change in operation of the site, or change to the permit obligations.

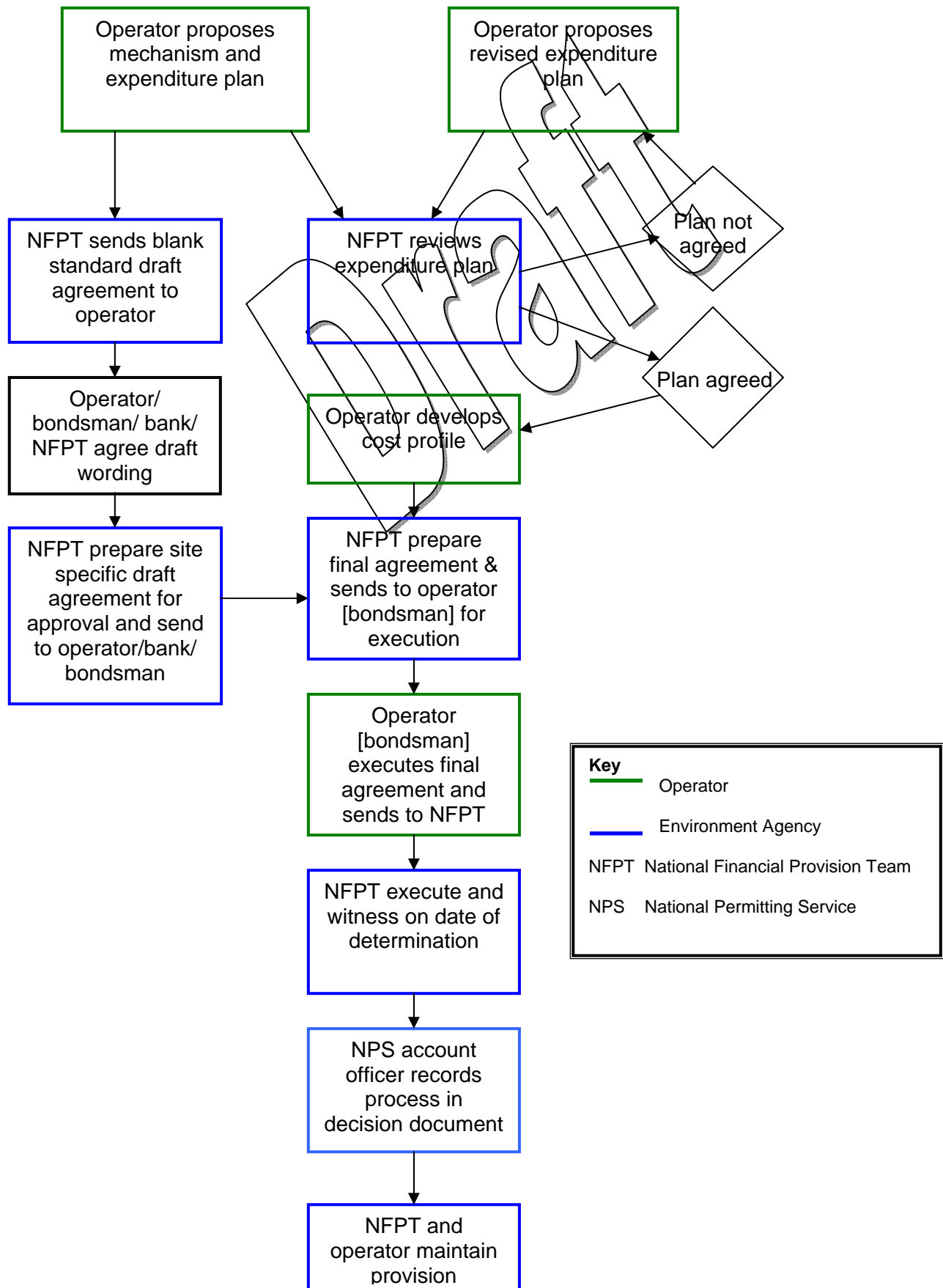
8.2 In reviewing the financial guarantee several aspects would be considered, such as:

- validity of the after-use scenarios of the waste facilities,
- assumptions of the usage of environmental resources (notably groundwater, surface water, air, land), the change of unit costs for rehabilitation measures (due notably to increased material prices, or new, more efficient technologies),
- efficiency and success of closure/remediation measures,
- change of the regulatory framework and of predictions on environmental impacts.

8.3 When we approve the closure of the mining waste facility we must write to the operator releasing them from the financial guarantee which relates to the operation of the facility. The financial guarantee for the aftercare of the facility must remain in place until the environmental permit is surrendered.

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**Figure 1 Flow chart of the financial guarantee assessment process**



## Appendix 1: Mechanisms for making financial guarantees for mining waste facilities

### A1.1 *Bonds*

A bond is a form of guarantee that, in this instance, will involve up to three parties

- i) the party requiring the bond (the operator/permit holder)
- ii) the bondsman
- iii) the bond receiver (the Agency or the operator)

In the event of the operator/ permit holder becoming unable to meet the liabilities arising from the permit, there would be recourse to the bondsman to provide monies to fund any expenditure. It is therefore necessary to conduct a financial health check of the bondsman (this will normally be carried out by our Treasurer (Head Office)).

Understanding the basis on which the financial health checks will be conducted will assist operators in selecting an appropriate bondsman in advance of making their proposals for financial provision.

We cannot supply a list of “acceptable” bondsmen or financial institutions. Considering the acceptability or otherwise of a particular bondsman will depend on individual circumstances. This may include the size of the bond and the credit rating of any proposed surety, which may change with time. It may therefore be that a bondsman previously accepted does not satisfy us on a subsequent application. We currently apply the ‘Standard and Poor’s’ or Moody’s insurer ratings. We only accept ‘investment grade’ ratings.

Bonds may be operated in a similar way to escrow accounts in relation to the value of the bond at any point of time in the life of the site. An expenditure profile will need to be drawn up which identifies the potential exposure to financial liability that may occur throughout the life of the permit.

Ordinarily bonds are taken for a fixed period of time (normally short term); this option is not therefore suitable for long term provision unless the duration of the bond will coincide with the life of the permit. Because it is not possible to predict with any certainty what the duration of a permit will be, a renewable bond is more likely to fulfil our financial guarantee objectives.

### A1.2 *Renewable bonds*

These bonds contain a clause requiring the operator to renew the bond arrangement prior to the expiry of the current agreement (the bond cannot be renewed merely by way of letter, except where that letter comes directly from the surety). Failure to comply would constitute a default and would result in the existing bond being drawn upon. The monies provided by the bondsman would then be used to discharge the obligations of the permit. Legal agreements would prevent their use for other purposes. Renewable bonds are therefore suitable for long term financial guarantees.

A renewable bond may be for a fixed sum from day one, or it may be incremental building up year by year as the liability on the site increases. In either case, the sum will be subject to an annual Retail Price Index (RPI) adjustment as specified in the relevant clause in the performance agreement. Our National FP team will carry out this calculation. The annual RPI adjustment to the bond value will need to be communicated

to both the operator and the bondsman. We will require written confirmation from the bondsman that the bond value has been amended.

Unlike an escrow account where the value of the provision may be related to the estimated volume of waste deposited (or accumulated) (and therefore may not necessarily be predetermined), the incremental bond will follow a profile agreed at the outset and will normally be documented within a schedule to the performance agreement. It will still be necessary to review the rate of input into the mining waste facility and confirm that the estimated liability is adequately covered by the value of the bond at that point in time. Irrespective of whether the bond is renewable annually or every 3 or 5 years, it will be necessary to carry out the RPI adjustment annually.

### **A2.3 Escrows**

An Escrow is an account held by a third party (usually a bank) until one of both of the two parties has fulfilled stated conditions. Escrow accounts are normally cash based, although government backed security, such as treasury bonds would also be acceptable.

The National FP team will review the Escrow account regularly (at least annually) to ensure that the amounts deposited (or accumulated) accord with the expenditure profile. The sum will be subject to an annual Retail Price Index (RPI) adjustment as specified in the relevant clause in the performance agreement. Our National FP team will carry out this calculation. The annual RPI adjustment to the escrow value will be communicated to the operator.

The draft mandate attached to the agreement is designed to facilitate our objectives. In order to do so, the document differs significantly from a typical mandate because it is intended to vary the legal rights of the bank. It excludes by agreement certain rights that would normally be exercisable by the bank as a matter of law, for example the right of set off. This means that there must be evidence of the agreement by the bank to operate the account in accordance with the agreement to ensure that there can be no dispute at a later date. This can be achieved by sending a letter setting out the required terms or attaching the draft mandate for the bank to sign and return to the Agency before the account is opened and before the escrow agreement is completed and the permit issued. It is important to ensure that the signatory to the agreement is authorised to sign on behalf of the bank; one would expect a branch manager to have such authority.

Where there is a need for us to call on the account for repositioning or increased monitoring, any withdrawal must be authorised by a National Permitting Service Centre Manager, following consultation with the appropriate Area team leader.

If the operator wishes to withdraw sums for works legitimately carried out under the permit, they should be requested to present contractors invoices as evidence. In circumstances where there is a major withdrawal, which has not been planned for, the sum taken out will impact upon the financial profile of the account. At that time the overall sum will need to be reviewed. Where necessary, a top up should be required, in consultation with the appropriate Area team leader.

As the escrow account is in the joint names of the operator and us it is vital that bank statements are issued to both parties on a quarterly basis. Our National FP team must review the bank statement to ensure that the value of the deposit is in line with the agreed profile. The expenditure profile of the escrow will have been calculated upon a rate per cubic metre - in line with the anticipated input rate to the site. It will be therefore be necessary for area staff to review the waste input rate and ensure that the cash available in the escrow continues to meet the potential liability at the particular point in

time. Our National FP team will also have to adjust the rate per cubic metre annually in line with the RPI clause in the performance agreement.

Escrow accounts are a suitable means of making short and long term financial provision.

#### **A2.4 Cash**

Some operators may wish to deposit a cash lump sum into an identified bank account. It must, however, be secured by way of a legal agreement (normally deed of trust) to ensure that the funds are only accessed for the required purposes. Interest accruing on these deposits may off-set an annual uplift for inflation. We will need to confirm periodically that the likely obligations arising from the permit are still adequately covered by the cash deposit.

#### **A2.5 Trust Based Investment Portfolios**

Cash and escrow accounts often do not attract high interest and we have received a number of requests to consider other investments as a means of providing financial guarantees. The financial sector has developed a variety of investment products which are designed to use monies set aside for closure and aftercare works to generate higher returns. This revenue will accumulate in the investment fund and offset the need for additional payments.

Where an operator proposes such an arrangement we will assess the mechanism against our policy objectives. If we are satisfied that a proposed mechanism means that funds are sufficient, secure and available in a way that meets our requirements we will accept the use of that product for making a financial guarantee.

We may agree in principle to the use of certain investment products. However we will in addition scrutinise each financial guarantee proposal to ensure the funds remain sufficient, secure and available.