

MEMO			
TO:	Board of Directors	FROM:	Breege Rooney
CC:		DATE:	24 July 2003
SUBJECT: Swalcliffe Ltd., Disused Sand/Gravel Pit, Coolamaddra– Technical Committee Report on Objections to Proposed Decision – Reg. No. 181-1			

Application Details	
Applicant:	Swalcliffe Ltd.
Location of Activity:	Coolamaddra, Glen of Imall, Co. Wicklow.
Reg. No.:	181-1
Proposed Decision issued on:	30/04/03
Inspector:	Malcolm Doak

Objections Received	Date Received
Mr. Thomas A. Keenan, National Environmental Services Agency on behalf of the applicant.	27/05/03

Consideration of the Objections.

The Technical Committee (Breege Rooney, Chairperson and Dave Shannon committee member) have considered all of the issues raised and this report details the Committee's comments and recommendations following the examination of the objection on this facility.

OBJECTION No. 1:

Mr. Thomas A. Keenan, National Environmental Services Agency

GENERAL

The conditions being objected to were detailed. The applicant is very anxious to operate the facility in accordance with any Licence issued by the Agency but is concerned that some conditions could not be fully complied with, or would place unreasonable, or unworkable, constraints on the operation of the proposed activity. The applicant urges the Agency to take account of the detailed objections.

GROUND 1

Condition 1.1 - Activities Licensed

Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.

This condition is acceptable, but if some of the waste recovered from the site proves to be suitable for disposal by deposit on, in or under land (including landfill), at some suitable off-site location to be approved by the Agency, then the restriction placed by the limiting of Class 1 activities to the deposit of recovered inert soils at the facility following excavation and treatment of waste, could effectively exclude any off-site deposit in, on or under land (including landfill), of waste recovered from the site even at facilities approved by the Agency.

It is requested that the wording in “Part I Activities Licensed” be amended to facilitate the possible off-site deposit of suitable waste in, on or under land (including landfill), at facilities to be approved by the Agency.

Technical Committee’s Evaluation

Condition 1.1 is quite clear in that it is limiting the waste activities that can be carried out at this facility i.e. the disused sand/gravel pit at Coolamaddra to those listed in Part 1: Activities licensed of the PD. This does not preclude sending appropriate waste to a suitable landfill. All waste must be classified in accordance with Condition 5.3.1 and if waste is deemed suitable it may be allowed to be disposed of at a landfill subject to Agency approval, Condition 5.7.

Recommendation

No Change

GROUND 2

Class 6 Recovery of Components used for Pollution Abatement

The Applicant notes that this class of activity is to be excluded from the Licence on the basis that no such activity is envisaged. The Applicant is objecting to this decision, on the basis that there will be equipment e.g. leachate sump and pump, litter fencing and other as yet unknown components used for pollution abatement during the operation of the licensed activities and these materials will need to be recovered once these activities cease operation.

It is requested that the Agency include Class 6 – Recovery of components used for pollution abatement in the licence. If this is not possible it is requested that the Agency clarify that the licensee will be allowed to recover at least the materials referred to from the site when the site is being re-instated.

Technical Committee’s Evaluation

The Technical Committee notes that the applicant applied for this class of activity in the application and agrees that Class 6 of the Fourth Schedule should be included in the licence. The TC recommends that equipment used for pollution abatement e.g. leachate sump and pump, litter fencing and other equipment should only be removed after all waste has been removed from the site and subject to the agreement of the Agency.

It is recommended that Class 6 under Part 1 Activities Licensed. Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996 should be included so as to allow the applicant to recover equipment used for pollution abatement. In addition, a condition should be included so as to obtain the permission of the Agency to remove any pollution abatement equipment.

Recommendation

Amend Licenced waste recovery activities to include Class 6 as per the following:

*Licensed Waste Recovery Activities, in accordance with the
Fourth Schedule of the Waste Management Act 1996*

Class 6	Recovery of components used for pollution abatement:
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Reason: This activity is limited to the recovery of equipment used for pollution abatement.

Include a new Condition as follows:

Condition 3.13 Pollution Abatement Infrastructure

3.13.1 Infrastructure used for pollution abatement shall only be removed from the facility after all the waste has been removed and subject to the agreement of the Agency.

GROUND 3

Condition 2.1.1 Experienced Facility Manager

The Applicant is objecting to the requirement that the person in charge has to be a registered professional with chartered status.

Technical Committee's Evaluation

The Technical Committee is of the opinion that this is a unique situation and as such is of the opinion that a suitably qualified and experienced facility manager who is a registered professional with chartered status is required for this facility. Hence, the Technical Committee recommends no change.

Recommendation

No change.

GROUND 4

Condition 3.1 (Installing Shuttering)

The Proposed Decision requires the temporary installation of interlocking sheet piles between the waste body and the Coolamaddra Stream as described in Attachment D of the Application: Facility Design and specified in Tab 7 of Method Statement – Document 1: Response to High Court Order Ref 2002 No. 25 MCA September 2002. At the time of preparation of the response to the High Court and the subsequent preparation of the Licence application it was proposed to install this shuttering to provide a physical barrier between the waste and the Coolamaddra Stream. Recent consideration of the effects and implications of installing this shuttering have led the applicant to seriously reconsider the wisdom of attempting to install this shuttering.

The Applicant believes that the weight of the machinery, in the range 25 to 35 tonnes, positioned on top of the waste pile, close to the Coolamaddra Stream and also close to the location in which it is intended to install the shuttering, would be a substantial risk to the safety of the machine and it's operator in attempting to carry out this work, and a similar substantial risk that the machine would cause subsidence / slippage of waste into the nearby

Coolamaddra Stream. The installation of the shuttering would de-stabilise the bank between the shuttering and the Coolamaddra Stream.

Therefore it is believed that there is a substantial and real safety and environmental risk associated with this proposal to install the shuttering in the very limited, and very difficult to access, space between the waste and the Coolamaddra stream, and in effect it may prove impossible to achieve installation of the shuttering as proposed.

It is also believed that the installation and subsequent removal of the shuttering would de-stabilise the existing natural hedge-row that exists between the location of the waste and the Coolamaddra Stream. There would therefore be a significant risk that this hedgerow would be lost as a result of the proposed installation and removal of the shuttering.

It is believed that Surface Water Management / Protection can be more effectively achieved by maintaining the existence and integrity of the existing hedgerow and its consolidated soil bed between the location of the waste and the Coolamaddra Stream. In addition, it is suggested that all waste within at least 1m of the consolidated base of the existing hedgerow, and in the area in which it was intended to install the shuttering, be excavated with light weight machinery so as to minimise the risk of disturbance to the consolidated bed of the natural hedgerow.

It is argued that there has been no detectable contamination of the surface water stream by leachate from the waste and that only one of the Groundwater Monitoring locations showed signs of contamination.

The Applicant believes that monitoring of the surface water stream and careful management of the excavation process, together with the operation of the other elements of the proposed licence, (particularly Condition 9) will provide appropriate and adequate protection for surface water in the Coolamaddra Stream. It is requested that the Agency remove the requirement for the installation of the temporary shuttering from the licence.

Technical Committee's Evaluation

It is stated in Document 1, Method Statement: Response to High Court Order Ref: 2002 No. 25 MCA Excavation of Unauthorised Waste Disposal Site Coolamaddra, Co. Wicklow that the temporary installation of interlocking sheet piles between the waste body and the Coolamaddra stream are required in order to:-

- Contain leachate during excavation and to
- Eliminate the potential of waste debris falling from the embankment into the stream.

The Technical Committee agrees with this opinion and believe that lighter machinery than in the range 25 to 35 tonnes could be used to do the job. The alternative proposal of maintaining the existing hedgerow and excavating all waste with lightweight machinery within 1m of the base of the existing hedgerow is not considered sufficient to prevent leachate or waste entering the stream.

Recommendation

No Change.

GROUND 5

Condition 5.3.2

The Applicant believes that the requirement to remove waste by section grid, each measuring 5m by 20m as absolute values in Condition 5.3.2 may be both impossible to comply with and be un-necessarily restrictive. In addition, on-site operational and safety requirements may not always be best served by the removal of waste by dumper, as required by Condition 5.3.2, to the main waste processing area. There may be times when the only safe or practical way of removing waste to the main processing area will be achieved by using a mechanical shovel of the mechanical excavator, or other such mechanical equipment.

It is requested that the absolute dimensions be removed in favour of a less restrictive wording such as "The excavation of waste will be by section grid, measuring not more than 100m², which will be removed to the main processing area" or other similar and suitable wording.

Technical Committee's Evaluation

The Technical Committee agrees to amending the grid dimension to not more than 100m² as the area of the grid will be the same as a grid measuring 5m x 20m. In addition, the Technical Committee would also recommend allowing a dumper or other similar method to be used to transfer the waste to the main processing area.

Recommendation

Amend Condition 5.3.2 as follows:-

The excavation of waste shall be by section grid, **measuring not more than 100m²**, which will be removed to **the** main waste processing area.

GROUND 6

Condition 5.6.1

The wording for condition 5.6.1 in the Proposed Decision is as follows:

"The excavation process will be deemed to be completed once excavations have been carried out to a minimum of 1m below the deposited waste." It is requested that the wording of this condition be amended to take account of the possibility that rock may be encountered at a depth of less than 1m below deposited waste to read as follows: " The excavation process will be deemed to be completed once excavations have been carried out to a minimum of 1m below the deposited waste or to rock, whichever is achieved first" or other similar and suitable wording.

Technical Committee's Evaluation

The Technical Committee agree with the proposed changes but recommend that the term bedrock should be used instead of rock.

Recommendation

Amend Condition 5.6.1 as follows:-

The excavation process will be deemed to be completed once excavations have been carried out to a minimum of 1m below the deposited waste **or to bedrock, whichever is achieved first.**

GROUND 7

Condition 7.6.1

The wording for Condition 7.6.1 as contained in the Proposed Decision currently reads as follows:- “The maximum height of waste and recovered soil stockpiles is to be 2m high. Stockpiles shall be covered with tarpaulins or an impermeable geotextile progressively, and at the end of each working day, as appropriate”. The Applicant objects to the inclusion of a 2m height limit on stockpiles. Such a restriction was not envisaged in the application, could effectively restrict access to the site and also restrict normal movement of mechanical equipment on the site. It is also likely to increase the number of times materials have to be handled and may increase the length of time required to reinstate the site. It was also pointed out that recovered soil can discharge from the exit conveyor attached to the trommel at a height well in excess of 2m above ground.

The Applicant does not accept that this height restriction is required as an Odour Control measure.

Technical Committee’s Evaluation

The Technical Committee recommend that the height restrictions on the waste stockpiles should be removed. The Technical Committee are satisfied that the covering of the stockpiles with tarpaulins or impermeable geotextiles will act as a measure to control odour and other nuisances. It also recommend moving the word 'progressively', in the sentence, for clarity.

Recommendation

Amend Condition 7.6.1 as follows:-
Stockpiles shall be covered **progressively** with tarpaulins or an impermeable geotextile and at the end of each working day, as appropriate.

GROUND 8

Condition 7.6.2

The Applicant objects to the requirement to spray the uncovered stockpiles every 2 hours with an anti-bacterial spray as its necessity, effectiveness, or usefulness is not known. The Applicant believes that it would be more appropriate to include a general requirement to apply this anti-bacterial spray, or other suitable de-odorising agent to be agreed with the Agency, at appropriate time intervals to minimise odours on the site. It is requested that the Agency review Condition 7.6.2 as currently proposed to take account of our objections.

Technical Committee’s Evaluation

The Technical Committee recommend that a deodorising spray should be applied to the uncovered stockpiles as and when required so as to minimise any odour that may be generated.

Recommendation

Amend Condition 7.6.2 as follows;-
A suitable deodorising spray shall be applied to uncovered waste stockpiles during the working day **so as to minimise odours**.

GROUND 9

Schedule C Monitoring Noise

The Agency has defined noise-monitoring stations at locations identified as GPS1 and GPS2 in the Proposed Decision, and has limited the noise levels at these locations at 55 Db(A) L_{Aeq} (15 minutes) daytime, and at 45 Db(A) L_{Aeq} (15 minutes) night-time. The Applicant is objecting to these locations on the basis that one of the noise monitoring locations is close to the location in which the trommel and other mechanical equipment will be operating. In addition, the normal requirements in respect of the control of noise emissions from an activity by the Agency relate to noise levels that would be measured at the nearest noise sensitive locations. Hence, the Applicant is objecting to these locations on the basis that they are situated at inappropriate locations, and that it is unreasonable to expect that the activity can achieve such low noise levels at the selected monitoring locations. It is requested that the Agency amend this Schedule by changing the noise monitoring locations such that they are located at "the nearest noise sensitive locations".

Technical Committee's Evaluation

The Technical Committee agree that noise monitoring should be carried out at two offsite noise sensitive locations plus GPS1 on-site. The Technical Committee notes that GPS1 is not a noise sensitive location and therefore is not subject to the emission limit values specified in Schedule B1. The locations should be agreed within one month of the date of grant of licence.

In addition, the noise emission limit values should be set at 30 minutes rather than the 15 minutes stipulated as it gives a better average for waste facilities where the various noise sources are intermittent and variable. Noise monitoring is already required at 30 minute intervals. There are also some changes required to in relation to the font size of dB ie. it should be dB rather than Db.

Recommendation

Amend as follows:-

C.1 Monitoring Locations

Monitoring locations shall be those as set out in Table C.1.1 and Figure 3 Rev A of the application.

Table C.1.1 Monitoring Locations

Dust	Noise	Surface Water	Ground Water	Leachate
Stations	Stations	Stations	Stations	Stations
GPS1 GPS2	GPS1 plus two noise sensitive locations to be agreed with the Agency, within one month of the date of grant of licence.	Two surface water locations shall be agreed within one month of the date of grant of licence.	MW-1 MW-2 MW-7	One leachate sampling location at main collection sump to west of waste body.

B.1 Noise Emissions:

(Measured at the noise sensitive location(s) indicated in Table C.1.1).

Day dB(A) L _{Aeq} (30 minutes)	Day dB(A) L _{Aeq} (30 minutes)
55	45

GROUND 10

Schedule C Monitoring Dust

The EPA has defined that the dust monitoring stations be located at GPS1 and GPS2. GPS1 is located on, or close to the main access road into the working area and GPS2 is located on the main road near the site entrance. Normal operations on the site are likely to make it impossible to comply with the proposed 350mg/m²/day, (in a 30 day composite sample with the results expressed as mg/m²/day), at these locations. It is requested that the Agency allow the originally proposed dust monitoring locations, identified as D1, D2, D5 and D6 in the original application, as they would be more appropriate and reasonable for the licensee to be able to comply with the dust emission limits. In support of the objection the applicant refers to the Inspector’s report, which states that “the topography is such that the third party dwellings are not at risk from dust arising at the illegal landfill.

Technical Committee’s Evaluation

The Technical Committee are of the opinion that dust monitoring should be carried out at four boundary locations to be agreed in advance with the Agency. The locations should be agreed within one month of date of grant of the licences as active waste extraction is only expected to last for 3 months. The Technical Committee note that the limit of 350mg/m²/day applies to a 30 day composite sample while Schedule C3: Dust Monitoring Frequency and Technique requires a weekly monitoring frequency. The Technical Committee recommend amending the monitoring frequency to monthly.

Recommendation

Amend as follows

Table C.1.1 Monitoring Locations

Dust	Noise	Surface Water	Ground Water	Leachate
Stations	Stations	Stations	Stations	Stations
Four boundary locations to be agreed with the Agency, within one month of the date of grant of licence.	GPS1 GPS2	Two surface water locations shall be agreed within one month of the date of grant of licence.	MW-1 MW-2 MW-7	One leachate sampling location at main collection sump to west of waste body.

C.3 Dust Monitoring

Table C.3.1 Dust Monitoring Frequency and Technique

Parameter (mg/m ² /day)	Monitoring Frequency	Analysis Method/Technique
Dust	Monthly during Waste Activities	Standard Method ^{Note 1}

Note 1: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.

GROUND 11

Schedule A Waste Handled

Schedule A of the Proposed Decision permits the licensee to handle a maximum of 10,000 tonnes of hazardous waste, and 2,000 tonnes soil at the proposed activity. The Applicant is objecting to the limit placed on the quantity of soil as they state that the amount of soil on-site can only be estimated and it is possible that it may significantly exceed 2000 tonnes.. The estimate of 2,000 tonnes of soil relates only to the quantity that would be required to fill an area of about 26m by 30m to a depth of about 1.5m. It was pointed out that there was an error in paragraph G. Restoration & Aftercare Scheme in submission dated 7 February 2003 which referred to a soil depth of 2.5m rather than 1.5m. It is argued that if the entire area of the site that is currently affected by waste is to be reinstated with a depth of between 700mm and 850mm of soil (before the addition of topsoil) then the minimum amount of soil required could range from 2,600 to 3,200 tonnes. If the density of the soil exceeds 1.6 tonnes per m³ then the weight of the soil required would be greater. Similarly if the re-instatement of the site requires an amount greater than 0.85m then the amount of soil required would be greater than 2,000 tonnes. If it is necessary to return the site to its current height then about 10,000 tonnes of soil would be required. It is therefore requested that the Agency take account of both the possible additional amount of soil on-site and the possible additional amount of soil that may be required to re-instate the site when specifying how much soil can be handled in Schedule A. An amount of 6,000 tonnes could be required to fill an area extending over about 100m by 25m to a depth of 1.5m at a density of 1.6 (sic).

Technical Committee's Evaluation

The "Hydrological Survey and Waste Quantity Survey" of 15/07/02 received by the Agency on 04/03/03 indicates that the entire deposited area is 2,600m². To restore this area with a depth of approximately 1.5m of topsoil and subsoil of an estimated density of 1.6tonnes/m³ (in order to satisfy Condition 4.3) would require approximately 6,000 tonnes of soil.

Hence, the Technical Committee recommend that the maximum soil quantity permitted to be handled at the facility be increased to 6000 tonnes. Hence, the overall quantity of waste should be increased to 16,000 tonnes. In addition, it is recommended to attach Note 1 to the maximum tonnage in the heading, rather than to the quantity of hazardous waste, as this gives flexibility as to the maximum quantities of the different waste types.

Recommendation

Amend Schedule A.1 as follows:

Table A.1 Waste Categories and Quantities

Waste Type	Maximum (Tonnes)^{Note 1}
Hazardous Waste	10,000
Soil *	6,000
TOTAL	16,000

Note 1: Unless otherwise agreed with the Agency

* To be agreed as part of the approved restoration plan.

Signed: _____
Breege Rooney
Technical Committee Chairperson

Dated: _____
7th August 2003