

MEMO

TO: Board of Directors **FROM:** Brian Donlon

CC: **DATE:** 12/9/01

SUBJECT : Tramore Landfill Technical Committee Report

Application details

Application Details	
Applicant:	Waterford County Council
Location of Activity:	Tramore
Reg. No.:	75-1
Licensed Activities under Waste Management Act 1996:	Third Schedule: Classes 1,4,12, 13 Fourth Schedule: Classes 2,3,4, 11, 13
Proposed Decision issued on:	9/4/01
Objections received:	4/5/01, 8/5/01
Submissions on objections received:	2
Article 34 letter issued	8/8/01
Article 34 response received	2 responses received on 21/8/01
Inspector that drafted PD:	B Foley

Objections received

Objection by Applicant 1
Objection by third party/parties 2
Submissions in relation to 2
Objections

1. Applicant : Waterford Co Co (prepared by MCOS)
2. Mr Raymond Hayden
3. Tramore Bay Conservation Group (prepared by Mr Joe Hendry)

A Technical Committee was established to consider the objections.

The Technical Committee included;

Brian Donlon, Chairperson
Regina Campbell, Inspector
Damien Masterson, Inspector

This is the Technical Committee's report on the objection.

1. Objection from Waterford Co Co (prepared by MCOS)

1.1 Part 1, Condition 1.1 / Schedule A

They state that this facility is the only outlet for the water treatment and waste water treatment sludges generated within the county. They are presently preparing a Sludge Management Plan for the County but in the interim there are no alternatives for the disposal of 200 tonnes of these sludges and request that Part 1, Condition 1.3 and Schedule A are amended accordingly.

They also state that at present 170 tonnes of litter and street sweepings are disposed of at the facility annually. They request that Condition 1.3 be amended to define Litter and Street Sweepings as one of the categories of waste allowable for acceptance.

Submission on Objection by Mr. Raymond Hayden

In his submission (dated 12/7/01) he states that (i) the disposal of 200 tonnes of municipal sludge would result in pollution of a highly sensitive environmental area ("European area of Special Interest") and of an area used for recreational activities by locals, (ii) a severe deterioration of air quality, (iii) increased traffic movements, (iv) negative visual effect and (v) health risks to humans, animals and vegetation in the area. He also objects to the disposal of street sweepings as the management of the site is inadequate and that WCC have failed in the past to adhere to guidelines concerning the disposal of waste

Submission on Objection by Tramore Bay Conservation Group

They state that there would be serious disquiet in the town if it was more widely known that 200 tonnes of sludges were accepted annually. Regarding the street sweepings, they state that a national and local campaign should be widely introduced to limit unnecessary packaging.

Technical Committee's Evaluation

The TC considers that as the site is unlined and there is no proposal for the lining of any area to accept such wastes and as the adjoining sensitive areas are vulnerable to pollution, that it is not suitable to landfill sludges at this facility. The TC note that the Inspector also states that sludges should not be landfilled in his report (page 3) and it is also outlined in Part II (Activities Refused). For the avoidance of doubt, this should be reflected in Condition 1.4.

Under the EU Directive (2000/532/EC) street sweepings are categorised as being "other municipal wastes" (20 03 03). Municipal waste means household waste as well as commercial and other waste, which, because of its nature and composition, is similar to household waste. Consequently, they can be accepted for disposal at the facility as currently set out in the PD.

In relation to TBCG submission, it is anticipated that the communications programme of the licence will cover waste prevention, waste recovery as well as waste disposal information in the locality.

Recommendation

Amend condition 1.4

No liquid wastes, animal wastes, animal by-products, hazardous wastes, **sludges**, or end-of life vehicles shall be disposed of at the facility.

1.2 Condition 3.4

They consider that 3 months is insufficient time to specify, procure and construct a perimeter fence and recommend that the timeframe be extended to 6 months.

Submission on Objection from Mr Raymond Hayden

He states that Waterford Co. Council's objection to the amount of time required to build a fence around the site outlines the inability of the applicant to manage a site. WCC knew that it would have to go through the procurement procedure and as such their inability to manage a simple procurement operation or its application is divorced from the reality of running and managing the site. This should be a ground for the reversal of the PD.

Submission on Objection by Tramore Bay Conservation Group

They state that high poles (presumably for netting) have been set around the dump and that the ugliness of Tramore dump has been exacerbated by this development.

Technical Committee's Evaluation

The TC considers that the timeframe should be amended to cater for procurement and construction of the security fencing.

Recommendation

Amend Condition 3.4.1

Within **six** months from date of grant of this licence security and stockproof fencing and gates shall be installed and maintained around the facility boundary. The base of the fencing shall be set in the ground.

1.3 Condition 3.7

They consider that 6 months is insufficient time to specify, procure and construct the Waste Quarantine Area and Inspection Area and suggest that the timeframe be extended to 9 months.

Submission on Objection from Mr Raymond Hayden

He reiterates his comments under Ground 1.2. He adds that the applicant wants an additional 3 months for these infrastructure as it pushes all work out by 3 months.

Submission on Objection by Tramore Bay Conservation Group

They state that the application has been in existence for over 2.5 years and that if the Council were in earnest about proceeding in a progressive way they would not be seeking to delay the implementation of good dump management practices.

Technical Committee’s Evaluation

The TC considers that the time-period indicated in the PD is sufficient time to specify, procure and construct the Waste Quarantine Area and Inspection Area. Construction of these areas is not a complex process.

Recommendation

No change

1.4 Conditions 3.11/5.10

They state that monitoring of the estuary has shown that the landfill in not having a major impact on the flora and fauna of the estuary. They state that there is nowhere in the County with the capacity to treat leachate if it was collected. They further state that on-site treatment and discharge is not catered for in the PD and “*that treated leachate would have to be tankered off-site with the same restrictions on disposal outlets*”. However, they state that restoration of the site with a low permeability cap would reduce leachate volumes and therefore reduce the already “*insignificant impact the landfill is having on the flora and fauna of the estuary*”. They propose that Condition 3.11 be removed. However, if this Condition is maintained they propose that Condition 5.10 be removed and thereby allowing leachate recirculation on-site as the only practical leachate management option.

Submission on Objection from Mr Raymond Hayden

He states that the area is one of environmental sensitivity. He questions their use of the term impact and how it is measured (long-term, short-term). He states that leachate must be managed, transported from the site and disposed of in a safe manner.

Submission on Objection by Tramore Bay Conservation Group

They note the Councils submission that the landfill is not having a major impact on the flora and fauna of the estuary. They further state that “*one is discouraged by from eating the shellfish in the area because of pollution*”.

They state that all of the water in the Tramore Back Strand and Bay area is used daily by bathers, fishermen, surfers and wind-surfers all year round. They consider that the

Councils suggestion that the groundwater is unusable (due to saline nature) is an extraordinary claim in respect of a premier seaside resort and they highlight that Tramore no longer holds a blue flag for its water quality.

They consider that WCC appear to indicate that the leachate situation is problematic and due to the fact that the facility is located on a marsh makes the problem worse.

Technical Committee's Evaluation

The TC consider that WCC should be required to install infrastructure to abstract leachate from the waste in areas not subject to saline intrusion. Further, WCC should not be allowed to recirculate leachate in an unlined landfill as this would result in uncontrolled discharge of List I/II substances.

Recommendation

No Change.

1.5 Condition 4.3.

They state that monitoring of groundwater and leachate levels within the landfill has indicated some ingress of tidal waters into the body of waste twice daily. They state that the waste body of the landfill consists of a “wet waste zone” and a “dry waste zone” above tidal level. They state that leachate formation will be completely prevented by the proposed capping and result in entombing of the waste, slowing the decomposition process and prolonging unnecessarily the life of the landfill.

They proposed an alternative cap, which will allow quicker biodegradation of the waste: Top-soil 0.2m thick, subsoil 0.5m thick, low permeability clay layer (0.3m thick) or geosynthetic material.

Submission on Objection from Mr Raymond Hayden

He states that the arguments by WCC underline their inability to adequately appreciate the importance of the site for the environmental and economic well being of Tramore which is a town highly dependent on its tourist industry.

Submission on Objection by Tramore Bay Conservation Group

They state that any child in Tramore can tell that the tide comes in and goes out twice a day. They state that there is no point in sealing something that the tide will wet twice daily. Since sealing is so important in any dump it is not good management practice to dump in a “wet zone” in the first place.

Technical Committee's Evaluation

The TC considers that cap specified in the PD takes into account the requirements of the Landfill Directive for non-hazardous waste landfills. There is scope for agreeing the barrier layer (4.3.1.d) in the cap specified.

Recommendation

No Change

1.6 **Condition 5.1.**

They state that the historical method of waste disposal has been for waste to be deposited into newly constructed bunded areas extending progressively out into the estuary area. They state that the landfill is not having a major effect on the flora and fauna of the estuary while the groundwater is unusable due to its saline nature. The revised method of disposal of raising the overall level of waste by filling over previously filled areas has the potential to result in negative impacts from litter, dust, noise and visual intrusion. They propose that Area 10 on Drawing TRA-LF-007 RevA be maintained as a potential future filling area should it arise that the current filling areas become too troublesome for reasonable management of the site.

Submission on Objection from Mr Raymond Hayden

He states that the facility should be strictly monitored by the EPA. Allowing the Council to decide what it deems too troublesome will allow the council to renege on their responsibilities to the environment considering its inability to adequately manage the site at present. He also refers to the Inspectors report, which states “that landfilling in the proposed extension would constitute environmental pollution.”

Submission on Objection by Tramore Bay Conservation Group

They state that unfortunately they must agree that this was the historical method of landfilling. However, they consider this objection as the “*County Council arrogating to itself more and more of the previous Back Strand on an “a la carte basis”- with blind indifference to the desecration of an area of great natural beauty and ecological worth and vulnerability*”.

Technical Committee’s Evaluation

The TC considers that the proposal to further extend the unlined landfill into Area 10 would result in the destruction of mudflats which are directly linked with the habitats of the cSAC.

Recommendation

No Change.

1.7 **Condition 5.7.4**

WCC request that the period allowed for final capping of completed cells be extended from 12 to 18 months. They state that 12 months is insufficient time to specify, procure and carry out the capping works.

Submission on Objection from Mr Raymond Hayden

He states that by objecting to the timeframe to complete site capping outlines the inability of the applicant to manage the site at present or have the operational skills to manage it in the future.

Technical Committee's Evaluation

The TC considers that the timeframe stipulated is reasonable and should not be altered particularly in light of the environmentally sensitive nature of the surrounding area.

Recommendation

No Change.

1.8 Condition 6.1 and Schedule C.

Schedule C.3 refers to Emission Limit Values for the volume to be emitted from the landfill gas flare as 3,000 m³/hr. It is considered that this is excessive and that the reference be deleted.

Technical Committee's Evaluation

The TC considers that this figure represents the maximum volume to be emitted. The exact design details of the flare will be agreed under Condition 3.2 (Specific Engineering Works). Relevant limits can then be imposed.

Recommendation

No Change.

Objection 2: Raymond Hayden

He listed eight grounds of objection. He states that the objection is not based on NIMBY but rather on a logical cost benefit analysis of the continued location of the facility in the centre of Tramore's Central Tourist Area. The continued operation of the facility could open up Waterford County Council to litigation from local business interests, persons whose health have been adversely effected, Environmental organisations and European Institutions.

2.1 Socio-economic Impact on Tramore

He states that the area is one of intense natural beauty and is one of Europe's largest Natural sea lagoons and as such is both environmentally sensitive and a key asset of Tramore's ability to attract and retain tourists. He lists various types of tourist accommodation within 1 km of the facility and states that they are particularly at risk to negative health effects from its location, poor visual surroundings, air pollution and litter nuisance.

Submission on Objection by Tramore Bay Conservation Group (TBCG)

TBCG supported all the objections of Mr Raymond Hayden. They state that their submissions should be accorded more weighting as they emanate from local people who

live daily with the problem and not from Consultants who live as far away as Co Dublin and Co Meath.

Technical Committee's Evaluation

The TC considers that the facility, which has a limited remaining lifetime operated in accordance with the conditions of the licence, will not cause environmental pollution.

Recommendation

No Change.

2.2 Effect on Marine Fauna in backstrand area and in Tramore Bay

The continued use of Tramore as a waste disposal facility will negatively impact on the type and quantity of marine life in the area. He also states that “*waste adds dioxins, inorganic chemicals, organometallic compounds or carbonyls, pesticides and empty packaging to the delicate ecosystem*”. Furthermore, he notes that the applicant has failed to address the past, present and future impact on marine fauna and that the facility has introduced rodents to the area which effect local flora and fauna and the feeding habits or local birds and mammals.

Technical Committee's Evaluation

The TC considers that all incoming waste for landfill disposal will be recorded. Further, the licensee is required, under Conditions 7.1,7.6, 10.3(d) and 11.5, to ensure that vermin and birds do not give rise to environmental nuisance at the facility.

Recommendation

No Change.

2.3 Effect on the hydrography of the area

He states that “*the filling in of a part of the back strand will cause a localised increase in the current velocities past the infill site which may lead to increased erosion on deposition in some areas with significant negative effects for the eco-system and the possible destruction of the backstrand and the natural sea lagoon*”.

Technical Committee's Evaluation

The TC considers the possibility of erosion and slope stability will be monitored and controlled by Conditions 8.10 and 8.11.

Recommendation

No Change.

2.4 Effect on Air Quality in the Area

He notes that the proposed scheme will have significant effects on the air quality in the area surrounding the site and that there may be significant health effects on persons living in nearby temporary and permanent accommodation.

Technical Committee's Evaluation

The TC notes that the licensee will be required to cap the filled areas, to collect and flare landfill gas and to implement measures to prevent odour nuisances.

Recommendation

No Change.

2.5 Poisoning of local flora, fauna and humans with waste through oral, dermal and inhalation

He also states that “coming in contact with waste from a disposal site exposes people and animals to three acute forms of poisoning (oral, dermal, toxic on inhalation). He notes that the facility cannot monitor all waste entering and therefore cannot “*assess accurately the organic and inorganic properties and its effect on the local eco-system and people who may come into contact with such waste*”.

He provided a table indicating the various levels of oral, dermal and inhalatory toxicity, and states that extremes of weather conditions can affect the surrounding area.

Technical Committee's Evaluation

The TC considers that compliance with the conditions of the licence will ensure that only non-hazardous waste will be accepted at the facility. Condition 5 ensures that proper waste acceptance and characterisation procedures will be in place and that the facility will be operated in a proper manner.

Recommendation

No Change.

2.6 Waste Pollution and Management

He states that all waste must be individually sorted and visually inspected. Otherwise, the following “products” will be deposited: organometallic compounds, inorganic substances, pesticides, empty packaging from hazardous wastes. The site has also failed to manage leakage of waste from their site and cited a Coastwatch Survey (October 1999) which highlighted the existence of large quantities of plastic bottles in Annewstown, Co.

Waterford as a result of high storm tides.

Technical Committee's Evaluation

The TC considers that Conditions 1.4, 5 and 10.2 which relate to waste acceptance, management and recording will provide for appropriate operation of the facility and ensure protection of the environment.

Recommendation

No change.

2.7 Landscape and amenities of the area

He suggests that the waste facility is a significant negative visual impediment for both locals and tourists as the facility is located in a recreational area (i.e. bathers, walkers, beach-related activities).

Technical Committee's Evaluation

The TC considers that compliance with the licence will not result in significant impairment for both locals and tourists.

Recommendation

No Change

2.8 Noise and Traffic pollution

The facility attracts both residential and commercial waste and it causes traffic congestion. Increased activity has taken place in the first quarter of 2001 which has led to long queues of vehicles trying to access the facility and thus blocking the entrance to the Atlantic Coast Apartments.

Technical Committee's Evaluation

The TC considers that vehicles carrying waste should queue in an orderly manner and should not cause traffic congestion. Noise monitoring is required by Condition 8.1 and ELVs are set under Schedule C1.

Recommendation

Add Condition 3.5.3

Traffic awaiting access to the landfill shall queue along the facility access road only.

Submission on Objection from Mr Raymond Hayden (received 12/7/01)

Additional items, other than submissions on the two other objections were raised in his submission on the objection. He included an extract from Tramore Strand Newspaper as evidence of the dumping of

hazardous waste at the facility and the deliberate attempts by the applicant to allow toxins to flow into an SAC.

He states that the preliminary decision to grant the licence seems to be based on an inspectors report which fails to form a logical coherent argument for granting the licence.

He listed a series of disturbing developments over the last number of weeks which should allow the Agency to reverse its original decision. These include (i) the failure to get a blue flag for 2001; (ii) the cancellation of the National Water Safety Council class due to unsafe bathing water (iii) the evidence of raw sewage on the nearby beach and (iv) imminent closure of Dungarvan dump resulting from an EPA action.

Technical Committee's Evaluation

The TC note these comments did not relate to the original objections and hence the EPA cannot consider them. The Inspector for the facility will be made aware of these comments.

Objection 3: Tramore Bay Conservation Group (prepared by Mr Joe Hendry)

3.1 They consider that the present landfill facility was created (1939) before the concept of damage to the environment came into being. It is an eyesore and a totally unsuitable location.

Technical Committee's Evaluation

The TC consider that the landfill has a limited remaining lifetime (c. 2 years) and the facility will be completely restored in consultation with Duchas in accordance with best practice.

Recommendation

No change.

3.2 They state that minimum monitoring of waste intakes is occurring. There appears to be no distinction between hazardous and non-hazardous materials

Technical Committee's Evaluation

This facility is classified as a non-hazardous waste landfill. All incoming waste loads to the landfill will be recorded in accordance with Condition 10.2 of the licence. Conditions 5.2 and 5.3 relate to waste acceptance and checking.

Recommendation

No Change.

3.3 The facility is situated in a high amenity area most of which is designated as a candidate SAC, pNHA and SPA for birds. The intertidal area is also a Ramsar site. They state that the Duchas and WCC maps for the proposed SAC are dissimilar.

Technical Committee’s Evaluation

The TC considers that the facility itself does not now lie within the SAC boundaries as currently defined by Duchas.

Recommendation

No Change.

3.4 They already know that WCC have infringed the proposed waste licensing application regulations by extending the present landfill into the adjacent SAC.

Technical Committee’s Evaluation

No further extension of the landfill is permitted under the licence. The facility itself does not now lie within the SAC boundaries as currently defined by Duchas. The licensee will be required to restore the facility fully in consultation with Duchas. Conditions controlling the operation and closure of the existing facility are intended to control any impact it is having on the surrounding areas.

Recommendation

No Change.

3.5 They contend that because of the lack of monitoring, that various hazardous and non-hazardous substances must be leaching into the Backstrand and thence out into the surrounding bathing areas.

Technical Committee’s Evaluation

The licensee is required to undertake regular monitoring of surface water, groundwater and leachate in accordance with Condition 8.1 of their licence. This landfill is classified as a “landfill for non-hazardous waste”.

Recommendation

No Change.

3.6 They contend that WCC’s historical and current mismanagement of the Dump leads into question their commitment and ability to adhere to licence conditions if and when a new licence is granted.

Technical Committee’s Evaluation

The TC consider that WCC will need to employ an appropriately qualified facility manager (Condition 2.1) and to put a management structure (Condition 2.2) in place in order to properly manage the activity.

Recommendation

No Change.

3.7 They state that the damage to the environment, both visually and practically is obviously enormous.

Technical Committee's Evaluation

The TC considers that compliance with the licence when granted will ensure that the activity will not result in environmental pollution.

Recommendation

No change.

3.8 They state that they are seriously concerned about the current and on-going erosion of the landfill site by incoming tides. There is ample evidence of items dumped many years ago being exposed and re-surfacing.

Technical Committee's Evaluation

The TC considers that these matters are covered under Conditions 8.10 and 8.11.

Recommendation

No Change.

3.9 They believe that there is no way under EU law that a landfill site should be located in such close proximity to popular bathing areas.

Technical Committee's Evaluation

The TC note that the facility has been in existence since 1939. However, we consider that there will be no extension into the mud/saltmarsh flats in order to protect the adjoining cSAC. Regular monitoring and reporting of waterbodies adjoining the facility are required.

Recommendation

No Change.

3.10 They state that Waterford Corporation have recently raised the charges at their City Dump with a concomitant increase of waste intake at Tramore. They believe that the present estimate of an increase from 10,000 tpa to 15,000 tpa over the next 3 years is a serious underestimate.

Technical Committee’s Evaluation

The TC considers that the waste tonnage threshold is catered for in Condition 1.3 and Schedule A of this licence. The applicant estimated that the waste intake in 1998 was c. 11,245 tpa and suggested a 3% increase in annual waste intake. This would indicate an intake for the present year of c. 13,000 tpa. The licence restricts the annual waste intake to 15,000 tpa. The TC note that accurate waste intake readings will be obtained upon installation of the weighbridge within 6 months of the date of grant of the licence. The final profile/height is covered in Condition 4.2.

Recommendation

No Change.

3.11 They state that Coastwatch Ireland have complained about the loss of a saltmarsh area immediately adjacent to the landfill facility. More of this valuable ecosystem will be lost if WCC continue to pursue their present management style.

Technical Committee’s Evaluation

There will be no expansion into the adjoining saltmarsh area. The licensee is required to manage the facility in an appropriate manner (Condition 2.1, 2.2). The TC is satisfied that the licence when complied with will ensure that there will be no environmental pollution from the activities licensed.

Recommendation

No change.

3.12 They state that they would be totally against any interference with Tramore Burrows which is well documented as an area of great ecological importance.

Technical Committee’s Evaluation

No further extension of the landfill is permitted under the licence. The licensee will be required to restore the facility fully in consultation with Duchas. Conditions controlling the operation and closure of the existing facility are intended to control any impact on the Tramore Burrows and the surrounding areas.

Recommendation

No change.

Submission on Objection by Tramore Bay Conservation Group (dated 11/7/01)

In their submission on the objection TBCG reiterated their earlier submissions, supported the anti-dump objections of Mr Raymond Hayden and added to their own earlier submissions (pages 4/5).

- They stated that “4-methol phenol” was detected in a sample of liquid taken from the dump and claimed that it is factually incorrect to state as the applicant did that zero quantities of industrial non-hazardous liquids and hazardous waste accepted in the dump.
- They include an extract from the local “Munster Express” newspaper.
- They referred to the fact that no funds were provided to the public to forward the alternative view, which would contravene the Supreme Court judgement in McKenna vs An Taoiseach 1995 IR.
- They request the Agency write to inform them why it do not see fit to grant an oral hearing.
- They ask the EPA to consider that many more people would have objected to the PD if the cost had not been so prohibitive.
- They ask the EPA if it is the norm to return the “application fee” in the event that an objector’s submissions are not found to be frivolous and vexatious.
- They requested copies of Duchas correspondence with the Agency in relation to the application.

Technical Committee’s Evaluation

The TC notes these comments did not relate to the original objections and hence the EPA cannot consider them. The Inspector for the facility will be made aware of these comments. Dr. Brian Donlon forwarded the Duchas Correspondence to TBCG in relation to the application on the 17/8/01.

Article 34 Notice (Sent 8/8/01)

Since 16/7/01, the Agency is required to give effect to the **Landfill Directive** in the case of any relevant waste licence that it may grant. The Agency wrote to all objectors to this effect on the 8/8/01 and included proposals to make changes to the PD if a waste licence was to be granted.

Article 34 Response from Objectors

1. **WCC Response** – MCO’Sullivan’s acting on behalf of WCC state that they have no objections to the changes to the PD.
2. **TBCG Response (received 21/8/01)**– They note the references in Ms. Bolger’s letter of 8/8/01(in relation to changes due to Landfill Directive). They made additional comments relating to other Environmental, Waste licensing and Administration matters.

Technical Committee’s Evaluation

The TC notes that the respondents did not have any objections to the proposed changes suggested by the Agency. Dr. Padraic Larkin wrote to the TBCG on the 23/8/01 in relation to the matters raised in their letter.

Recommendation

Make the changes outlined in the Agency’s Article 34 notice dated 8/8/01.

Signed: _____

Brian Donlon, Technical Committee Chairperson