

**Derry City and Strabane District Council Planning Committee Report**

**COMMITTEE DATE:** 3<sup>rd</sup> July 2019

**APPLICATION No:** LA11/2017/0510/F

**APPLICATION TYPE:** FULL

**PROPOSAL:** Proposed retention of underground slurry collection chamber, proposed pipework, safety fence and landscaping

**LOCATION:** Lands approximately 40 metres west of 24a Evis Road, Strabane

**APPLICANT:** John McCrossan

**AGENT:** Clyde Shanks

**ADVERTISEMENT:** 06-06-2017

**STATUTORY EXPIRY:** 22-06-2017

**RECOMMENDATION:** Refuse

**REASON FOR PRESENTATION TO COMMITTEE:** The recommendation is to Refuse.

All planning application forms, drawings, letters etc. relating to this planning application are available to view on [www.planningni.gov.uk](http://www.planningni.gov.uk)

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**1. Description of Proposed Development**

This application is for the proposed retention an underground slurry collection chamber and to connect new pipework, safety fencing and landscaping.

**2. Reconsideration**

2.1 This application was previously presented to the Planning Committee on 6<sup>th</sup> February 2019 with a recommendation to refuse planning permission. The report is attached at Appendix 4A.

2.2 In summary the ground for refusal was that the applicant had not provided sufficient information to confirm that there are no suitable existing buildings on the holding or enterprise that could be used to accommodate a slurry tank.

2.3 Members voted on this proposal and resolved not to accept the officer recommendation to refuse. Members heard the applicant's representative's submission in respect of the need for the proposed development and the suitability of the location of the slurry tank. Since the meeting on 6<sup>th</sup> February 2019, officers engaged with the applicant to resolve a number of issues, namely:

Detail of Level sensor

- 2.4 As it is proposed to seal and bury the slurry tank, Environmental Health Department (EHD) advised the requirement for further information from the applicant detailing the operation of a proposed slurry level sensor to be installed inside the tank. The purpose of the sensor is to detect the level that slurry has reached when it is being pumped into the tank to ensure it is not overfilled. Overfilling of the tank would result in the blockage of vent pipes necessary for the release of gases from the tank. Specifically it is necessary to know how this sensor will communicate with the operator to allow the pumping process to be switched off.
- 2.5 Section 9.12 of the report presented to Members for the meeting on the 6<sup>th</sup> February 2019, advises that as the application was recommended for refusal, detailed information regarding the operation and maintenance of the proposed level sensor had not been requested. The report went on to advise that if Committee is minded not to accept the officer recommendation, it will be necessary to request this information from the applicant.
- 2.6 Following presentation on the 6<sup>th</sup> February 2019, officers requested the detailed specification of the level sensor. At this stage EHD also requested more detail regarding the operation of the vent pipe system and proposed biofilter.
- 2.7 Information was submitted by the applicant/agent on 22 February 2019 and further consultation sent to EHD. EHD returned a response on 6<sup>th</sup> March 2019.
- 2.8 The technical information document submitted by the applicant /agent, detailing operation of the level sensor advises that the proposed "level sensor can be mounted onto the tank without compromising its structural integrity or seal. It benefits from a visible display and can also be connected to a computer to provide constant level data."
- 2.9 In assessing the information submitted by the applicant/agent on 22<sup>nd</sup> February 2019, EHD considered that no information has been provided to confirm if the level sensors proposed can be used in this type of tank, which of two types of sensor detailed in the submission will be installed,

how it will be installed, how it will be maintained/calibrated to prevent irregular readings and how pumping to the tank will be controlled to prevent overflow.

2.10 On 14<sup>th</sup> March, the agent was again afforded an opportunity to provide further detail regarding the level sensor. Further information was received from the applicant/agent on 3<sup>rd</sup> May 2019 providing technical information on a specific type of meter. Comment was provided by EHD on 31<sup>st</sup> May 2019.

2.11 EHD states however that whilst the information submitted demonstrates that monitoring devices are available to provide readings on levels within a water tank, no information has been provided to confirm if the level sensors can be installed in an enclosed slurry tank, how it will be installed, how it will be maintained in perpetuity, how it will be calibrated to prevent irregular readings and how pumping to the tank will be controlled to prevent overflow.

2.12 Two opportunities have now been afforded to the applicant/agent to submit detailed information regarding the proposed level sensor. It remains the case that the applicant has failed to demonstrate that a suitable device can be installed.

#### Biofilter performance

2.13 Regarding operation of the Biofilter, the information submitted by the applicant /agent to explain its operation, instead advises the use of active carbon granules. EHD considered this to be a change to the methodology proposed to reduce odour concentration from the slurry tank. A reduction in odour level of 70% was referenced by the agent but no information was provided to support how this figure was determined. EHD proposed a condition requiring the submission of a report assessing the performance of the odour abatement plant within one month of the slurry tank installation coming into operation. The condition also imposes a requirement for further abatement measures to be detailed in the event that the 70% reduction in odour is not achieved. The condition further requires that in the event that the 70% reduction is exceeded that use of the tank shall cease until the further odour abatement is achieved. Officers, however, took the view that as active carbon granules, rather than a biofilter was now proposed, that the detail regarding the odour abatement achievable using this methodology needed to be evidenced prior to the grant of planning permission.

2.14 Further information was received on 3<sup>rd</sup> May 2019 regarding Biofilter performance and included a document titled "Evidence, Biofilter performance and operation as related to commercial composting." EHD advises that whilst this document provides evidence on the effectiveness of biofilters to some degree, it should be noted that the document refers to commercial composting

and not the effectiveness of such odour mitigation measures when connected to an enclosed slurry tank that relies on naturally vented odour from the enclosed underground slurry tank. EHD requires confirmation that the proposed abatement plant is actually a biofilter. EHD also has concerns that no detailed drawings or technical performance detail for the proposed “biofilter” have been provided in support of the proposed development.

2.15 Notwithstanding the above assessment, EHD advises that the odour impact assessment undertaken by Irwin Carr demonstrates that odour emissions associated with the slurry tank (without odour abatement) will not exceed  $3\text{ou}/\text{m}^3$  at the nearest receptor. With the inclusion of a biofilter the highest predicted 5 year average at the nearest receptor was  $0.23\text{ou}/\text{m}^3$ , based on an odour reduction of 70%. However additional odour control measures would be seen as a betterment should planning permission be granted for the proposed development to further minimise the impact of any odours on nearby dwellings.

2.16 This change in odour abatement methodology is also a matter raised by the objector to the application, Mr Flanagan. EHD was consulted for comment in respect of Mr Flanagan’s concerns. The matter is addressed in section 3.17- 3.22 below.

DAERA Natural Environment Division (NED)

2.17 NED was consulted to provide comment in respect of an apparent discrepancy between documents stating the area of land to be used to spread slurry. This discrepancy posed the possibility that ammonia calculations were incorrect. NIEA has reviewed an update air quality impact assessment however and is satisfied, subject to conditions, that the development is in line with DAERA’s operational protocols on nitrogen emissions.

### **3. Representations**

Since presentation to Committee on 6<sup>th</sup> February 2019 further letters of support and objection have been received. These are appended in full in Appendix 4B.

#### Letters of Support:

3.1 Declan McAleer MLA, made representation to Committee on behalf of the applicant at the meeting on the 6<sup>th</sup> February. He wrote to the Planning Department on 28<sup>th</sup> February 2019

requesting to know why the application had not returned to the meeting on the 6<sup>th</sup> March 2019.

3.2 In a response to Mr McAleer on the 28 February 2019, officers advised that further information regarding operation of the biofilter and level sensor was required, that the agent had submitted this information on 22 February 2019 and that EHD had been re-consulted and neighbours re-notified for comment. No further correspondence was received from Mr McAleer MLA.

3.2 Northern Ireland Agricultural Producers Association (NIAPA): NIAPA advise that the project will not lead to any intensification in production but is a measure undertaken to prevent any potential for pollution. It goes on to state that every preventable measure has been taken to reduce and eliminate potential odour and that the business is compliant in relation to nutrient management.

3.3 Ulster Farmers Union (UFU): advise that they have visited the site and understand that the tank is compliant with industry standards implemented by DAERA and NIEA. The letter also states that additional measures to protect residential amenity from odours will be implemented.

#### Letters of Objections

3.5 As the operational detail of the level sensor and biofilter are matters of concern to Mr Flanagan, the objector to the development, a neighbour notification letter issued to him to allow further comment to be made if he so wished. In addition in respect of the operation of the slurry tank, written representation was received from Mr Patton. Mr Patton advises he is a Project Engineering Manager in the chemical/process industry and he presented to Committee on behalf of Mr Flanagan at the meeting on 6<sup>th</sup> February 2019.

3.6 In summary the following concerns were raised by Mr Flanagan and Mr Patton

#### Structural integrity and safe operation of the slurry tank

- Unconventional Tank Design
- Risk of Pressurisation due to build-up of gases within the tank should the single vent pipe become blocked
- Unknown Pressures and Flow rate
- Anaerobic Processes and explosive gases
- Routine internal inspection impossible: ‘

- No documented construction process

3.7 In response to these concerns officers again consulted NIEA Water Management Unit (WMU), Health and Safety Executive NI (HSENI), EHD and Building Control. The following comments were received:

3.8 HSENI: The Health and Safety Executive for Northern Ireland (HSENI) is a statutory consultee for certain developments within the consultation distance (CD) of major hazard installations. HSENI advised that if this proposed development does not fall within the consultation zone of any major hazard, it has no comment to make. As previously advised in their response dated 28 March 2018 the development is not within the consultation distance of major hazard installations i.e. gas pipelines, COMAH sites or within 100m of a quarry.

HSENI further advised that whilst it would be advisable to seek professional advice they cannot provide details on who can provide this.

3.9 WMU advised that: The slurry tank was successfully notified to NIEA in 2013 in compliance with The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003, Nitrates Action Programme Regulations (Northern Ireland) 2014 and subsequently the Nutrient Action Programme Regulations (Northern Ireland) 2019. NIEA Water Management Unit staff are not qualified engineers and therefore are dependent on the professional competencies and expertise of qualified Chartered Engineers that are required to provide Water Management Unit with the correct certification on the structural integrity of slurry/silage tanks and/or stores and notify Water Management Unit that all new slurry/silage tanks/stores are constructed to the required British Standards. NIEA Water Management Unit cannot comment on the other issues raised in the objection letters (unknown pressures, flow rates, odours, venting systems, bio filters, explosive gases, etc.) as these do not come under our remit'.

3.10 Building Control advised that they have no remit with regards to slurry tanks.

3.11 EHD: In respect of Tank Design,' Risk of Pressurisation,' 'Unknown Pressures and flow rates,' 'Anaerobic Processes and explosive gases,' 'Routine Internal inspection impossible,' and 'No documented construction process' EHD considers that these matters could only be addressed by someone from an engineering background.

3.12 However with regards to 'Anaerobic Processes and explosive gases,' the EHD refers to the Clyde Shanks Letter dated 31<sup>st</sup> July 2018 which advises that slurry does not explode and goes on

to say that “As there will be no blockages within the vent pipe there will be no risk of explosion.” The Environmental Health Service would also refer to the previous response to the Planning Department, dated 14<sup>th</sup> August 2018 in relation to blockages of the vent pipe which stated that “If pipework is properly constructed, sealed, protected and maintained there should be no pathways from which leaks could exist or by which material enters the pipe.”

3.13 Officers acknowledge that the proposed operation of this slurry handling installation is not conventional, having stated in Section 9.7 of the report presented to members on 6<sup>th</sup> February 2019, that’... there is no doubt that this slurry storage system proposes an essentially new way of mitigating potential odour impact from slurry tanks’. One of the key components of the operation of the tank and its associated infrastructure is the level sensor. The adequate operation of the level sensor is critical to ensuring that the vent pipe, which is required to release gas from inside the sealed tank, does not become blocked as a result of overfilling. On 12 February 2019 and 14 March 2019, Officers afforded the applicant opportunity to demonstrate how the level sensor will be installed, how it will operate and how it will be maintained. As set out in section 2.4-2.11 (above) however a sufficient level of detail, required to give assurance that the tank will operate as proposed, has not been submitted.

3.14 Furthermore, having further considered the concerns raised in respect of the safe operation of the tank, and given that no statutory consultee can provide comment regarding this matter, Officers are now of the opinion that it cannot be determined that the tank and its infrastructure can be operated and maintained in a safe manner which will not give rise to demonstrable harm to residential amenity.

3.15 Enforceability of conditions: this matter was considered in section 9.7 of the report presented for the 6<sup>th</sup> February committee (appended below). Mr Flanagan queries how conditions proposed by EHD can be enforced and suggests that conditions regarding the frequency of slurry mixing is a required condition. Officers are not in a position to present conditions for reasons set out in section 4 below.

3.16 Bio-filter no longer proposed. Mr Flanagan considers the use of carbon granules, to be a significant downgrading of the odour management plan and queries the impact this will have on his amenity due to odour.

3.17 Consideration of the odour abatement methodology is presented at section 2.12 -2.15 above. EHD advises that whilst no information has been provide to support the claim that the inclusion of a biofilter will result in a reduction in the predicted odour concentrations by 70%, the odour

impact assessment undertaken by Irwin Carr demonstrates that odour emissions associated with the slurry tank (without odour abatement) will not exceed  $3\text{ou}/\text{m}^3$  at the nearest receptor. With the inclusion of a biofilter the highest predicted 5 year average at the nearest receptor was  $0.23\text{ou}/\text{m}^3$ , based on an odour reduction of 70%. The inclusion of a biofilter would introduce an additional odour control measures resulting in a betterment of the impact of any odours on nearby dwellings.

3.18 Mr Flanagan considers that the proposed filter is an 'Unproven experimental technique' and that 'according to the limited information provided it does not actively draw the vent gas through the carbon granules; instead it appears entirely passive, relying on perforations in the vent pipe to allow some of the gas to come in contact with a surrounding bed of carbon. This is unlikely to be effective since the vast majority of the gas would simply flow along the path of least resistance directly out of the vent pipe.' EHD agrees that the gas would simply flow passively along the path of least resistance out of the vent pipe and requires clarification:

- on how the waste gas interacts with the active carbon granules and
- that the description of the abatement proposed is a 'biofilter', bearing in mind the use of carbon granules.

3.19 Mr Flanagan also queries how the 'spent' granules will be disposed of.

3.20 EHD advises that it is their 'understanding ... that activated carbon granules can be regenerated by a supplier or should be disposed of at a suitably licensed waste management facility that is permitted to accept this type of waste. Further information should be sought from the applicant on how 'spent' activated carbon granules will be disposed of'.

3.21 Mr Flanagan considers that insufficient information has been submitted to demonstrate how the level sensor would work. This matter is addressed at section 2.4-2.12 above.

#### Drainage and proximity of watercourses

3.22 Mr Flanagan identifies a number of drains in the vicinity of the tank and considers that drainage from the tank to a soakaway 'cannot be contemplated'. NED states that the proposed site layout indicates that surface water gullies at the site entrance will connect to a soakaway. In respect of run-off from the slurry tank, NED further advises that the applicant must adhere to their responsibilities under The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (SSAFO) Northern Ireland 2003 and The Nitrates Action programme (NAP) Regulations (NI) 2014. Under these regulations only clean water i.e. water not defined as slurry or dirty water should be disposed of to a soakaway. NED has not expressed any concern regarding the matter of drainage from the site. Accordingly Officers consider there is no reason to refuse permission on this basis.

#### Visibility Splay Provision

3.23 Mr. Michael Scally, of Oliver Scally and Co Solicitors, wrote to Planning Department on 28<sup>th</sup> February 2019 on behalf of Mr Flanagan requesting an update following presentation to committee and raising the matter of visibility splay provision. The procedure regarding reconsideration of applications was advised to Mr Scally. Regarding visibility splay provision, this matter was also raised and addressed in section 9.13 of the report presented for the 6th February 2019 meeting. Previous consideration of the matter notwithstanding, DfI Roads (DfI R) was again consulted for comment. In summary DfI R advised

'..... that visibility splays from the access are achievable in both directions with no work required, except for the facing back of approximately 8.0m of hedging to the east of the access as and when necessary. No work is required in land under Mr. Flanagan's control. 'Approximately 20m<sup>2</sup> at the bottom of the driveway which abuts the public road is within the area needed for the applicant's splay. However, ..... DfI Roads are in control over this portion of land. This area would have originally been verge and was characteristically changed to allow for access to Mr. Flanagan's dwelling. Also, 'the applicant's visibility splay and Mr. Flanagan's visibility splay are mutually beneficial'.

3.24 In response, Mr. Michael Scally again wrote to the Planning Department on 16 April 2019 advising that 'according to our instructions, Roads Service do not have control over the land at the bottom of our client's driveway and our instructions indicate that this was never maintained by Roads Service'. Mr Scally then requested that DfI Roads confirm on what basis they do have control.

3.25 In response, DfI Road commented:

‘As stated in the returned consultation response of 11 May 2018, although Mr. Flanagan may own the ‘bed and soil’ of the area of land in question, DfI Roads control the area of land between the hedge lines for maintenance purposes. Whilst DfI Roads do not maintain private driveways, the Department are deemed to be in control of this area of land, which would have originally been verge, for the provision of services, utilities, etc. As stated in the returned consultation response of 01 April 2019, this portion of verge was characteristically changed to allow for access to Mr. Flanagan’s dwelling’.

3.26 On 13<sup>th</sup> June 2019 a letter from Mr Flanagan regarding visibility splay provision advised that he has ‘... altered [his] use of that portion of [his] lands such that the visibility splay sought by the applicant is not available and cannot be achieved in the future.’

3.27 In response to the Mr. Flanagan’s letter dated 13 June 2019, DfI R advises that it ‘... has consistently stated that Mr. Flanagan may own the ‘bed and soil’ of the area of land in question but DfI Roads have control over the area of land between the hedge lines for maintenance purposes. It should be noted that DfI Roads do not claim ownership of the ground currently being utilised for the visibility splays, (and which have been utilised from the existing laneway serving the slurry chamber since at least April 2009), however the Roads (NI) Order 1993 enables DfI Roads to exercise various controls over public roads – ownership of the bed and soil of public roads is not a factor in the exercise of these controls. In addition, the Order does not define the physical extent of a road and reliance is placed on Common Law (court rulings). The courts have in the past ruled that a road extends from boundary to boundary, where those boundaries were erected in relation to a road. In this context, where a verge forms part of a road, the Order enables DfI Roads to exercise various controls over it. As stated in the previous returned consultations, this portion of verge was characteristically changed to allow for access to Mr. Flanagan’s dwelling. DfI Roads’ consultation response of 18 August 2017 providing conditions, is still applicable’.

3.28 Accordingly Officers consider there is no reason to refuse permission on this basis.

Consultation with DARD

- 3.29 Mr Flanagan references correspondence dated 8<sup>th</sup> March 2018 in which he was advised by planning officers that Health and Safety Executive NI, Department of Agriculture and Rural Development (DARD) and NIEA would be consulted for comment in respect of his objections. Mr Flanagan now raises a concern that DARD was not consulted in respect of his objections over safety issues regarding the planning application.
- 3.30 As a consultee in the planning process, DARD advises if farm businesses are active and established. DARD was consulted and provided comment on 19<sup>th</sup> July 2017 confirming that the farm business was active and established.
- 3.31 NIEA Water Management Unit has provided comment in respect of the construction of the slurry tank currently in situ and has advised that 'the tank was successfully notified to NIEA in 2013 in compliance with The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 and subsequently the Nitrates Action Programme Regulations (Northern Ireland) 2014'.
- 3.32 The tank has been 'signed-off' as structurally sound by a chartered engineer (Mr Thompson) who stated in a submission to the Planning Department dated 8<sup>th</sup> April 2019 that 'I certified this structure as designed and constructed to the SSAFO regulations and have had no evidence that it has not performed as a slurry tank'.

#### Consultation with HSENI

- 3.33 Mr Flanagan considers that as 'the planning authority have several times made the decision to seek the input of a health and safety body means that [we] are aware of potential safety issues concerning the application. Therefore, these issues must be resolved before determination of the application otherwise as a planning authority you have failed in your statutory duty. The onus is clearly on the applicant to present a report on the safety of a 'sealed' tank from a suitably qualified expert on sealed tanks and its operations, not a 'standard open tank' as has been done'.
- 3.34 The operation of this tank is described in Section 4 of the report presented for the 6<sup>th</sup> February 2019 committee meeting. It is evident that the operation of the tank however is not of a conventional nature. Because of this and in addition to Mr Flanagan's concerns regarding the safety of the tank, HSENI, WMU, Building Control and EHD were asked for comment. Consideration of the comments made by HSENI, WMU, Building Control and EHD is set out in sections 3.8-3.15 (inclusive) above.

#### **4 Consideration and Recommendation**

4.1 Following presentation to Committee on 6<sup>th</sup> February 2019, officers sought further information regarding operation of the level sensor Bio-filter and clarification regarding the area of land to be used for spreading slurry.

In respect of the biofilter and air quality conditions can be proposed. In respect of the operation of the level sensor, Officers are not however in a position to recommend conditions for reasons set out below.

4.2 Regarding the level sensor, information specific to how it will work in respect of this proposed slurry handling installation, has not been provided. This component of the installation is critical to ensuring that the slurry collection chamber can operate safely and the vent pipe system, required to ensure the release of gases from the sealed tank, does not become blocked due to overfilling of the slurry tank.

4.3 Mr Flanagan is concerned that blockage of the vent pipe could result in a build-up of gases within the sealed slurry tank resulting in it becoming pressurised and exploding. In respect of this matter EHD refers to the Clyde Shanks Letter dated 31<sup>st</sup> July 2018 which advises that slurry does not explode and goes on to say that “As there will be no blockages within the vent pipe there will be no risk of explosion.”

4.4 Critical to ensuring that the vent pipe system does not become blocked due to overfilling of the sealed tank, is a level sensor which can detect accurately the level of slurry within the tank. Since presentation to Committee on 6<sup>th</sup> February, the applicant/agent has been afforded two opportunities to provide information regarding the operation of the level sensor. The documents submitted however, lack information confirming that the level sensors can be used in this type of tank, how it will be installed, how it will be maintained/calibrated to prevent irregular readings and how pumping to the tank will be controlled to prevent overflow. The uncertainty regarding whether a suitable level sensor can be installed, operated and maintained means that it is not possible to provide condition(s) requiring the submission of information prior to the tank becoming operational.

4.5 The following reason for refusal is therefore suggested:

The proposal is contrary to policy CTY12 of Planning Policy Statement 21 Sustainable Development in the Countryside and the SPPS, in that insufficient information has been

submitted to demonstrate that a level sensor can be installed, operated and maintained so that the slurry tank and its associated infrastructure will not result in detrimental impact on the safety and amenity of adjacent residential dwellings outside the holding.

**Safe operation of the tank**

- 4.6 Regarding the matter of structural integrity of the tank and its infrastructure, Officers consulted Water Management Unit, Health and Safety Executive NI, Building Control and EHD. No agency has confirmed that the operation of this slurry handling facility will operate safely.
- 4.7 The proposal is contrary to the SPPS, in that it has not been demonstrated that this slurry handling installation will operate in a safe manner so as not to cause demonstrable harm to residential amenity by reason of uncertainty regarding its structural and operational integrity.