Northern Ireland Environment Agency
Resource Efficiency Division

Department of
Agriculture, Environment and Rural Affairs
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Our reference: **DAERA/23-233**

[redacted]

[redacted]

28 July 2023

Dear Mr [redacted]

Environmental Information Regulations 2004

With regard to your request for information received by the Department on 04/07/23 that sought:

1. Clarification on the total estimated quantity of waste at the Mobuoy site. You highlighted a discrepancy in the estimated volume of waste in our reply, dated 8 June 2023, and the estimated volume of waste presented in a Tetra Tech report.

2. Clarification on why the site was divided into 9 zones and the basis on which the boundary between each zone was selected.

3. Clarification on the scoring and weighting of each of the remediation options for each zone and 'clarification and amplification around the precise performance metrics used'.

I can advise that the Department has completed its search and can confirm that it holds all of the information you requested.

A copy of the information which can be disclosed is attached at Annex A.

If you require any clarification, believe that any part of your request has been overlooked, misunderstood or misinterpreted, please contact me in the first instance to see if it is a matter that can be resolved.

If you are unhappy with the manner in which your request for information has been handled or the decision to release/withhold information, you have the right to request a formal review by the Department. If you wish to do so, please contact The Review Section either by e-mailing daera.informationmanager@daera-ni.gov.uk or by post at The Department of Agriculture, Environment and Rural Affairs, Data Protection & Information Management Branch, Floor 2, Ballykelly House, 111 Ballykelly Road, Ballykelly, Limavady BT49 9HP, within two months from the date of this letter.

If after such an internal review you are still unhappy with the response, you have the right to appeal to the Information Commissioner at Wycliffe House, Water Lane, Wilmslow, CHESHIRE SK9 5AF, who will undertake an independent review of the Department's decision.

Yours sincerely,

[redacted]

[redacted]

Mobuoy Remediation Project

Annex A

Information Request 1 - Clarification on the total estimated quantity of waste at the Mobuoy site. You highlighted a discrepancy in the estimated volume of waste in our reply, dated 8 June 2023, and the estimated volume of waste presented in a Tetra Tech report.

When highlighting the discrepancy in the estimated volume of waste, you provided the information on Table 1, presented below.

Table 1

Waste Zone	Your reply dated 8 June Estimated waste quantity (m^3)	Tetra Tech Report Estimated waste quantity range (m^3)
1	358,907	286,526 - 746,163
2	234,496	305,544 - 438,389
3	229,415	236,600 (includes CIW Yard)
4	42,854	19,640 - 66,285
5	30,619	6,870 - 111,792 (there appears to be an error in this)
6	161,554	75,011 - 468,820
7	170,786	223,003
8	127,058	103,290 - 206,581
9	229,139	493,484 - 616,855
CIW Yard	45,616	Appears to be included with Zone 3.

Following a review of all ground investigation information now available for the Mobuoy site, incorporating both historical ground investigation information and recent additional ground investigation information, we confirm that it is estimated that the quantity of waste on the site is approximately 1,630,444 cubic metres (m^3) and this is the quantity of waste that requires remediation. (FAQ 2.1 and FAQ Figures 2.1 and 2.2 – as per our correspondence on 8 June 2023).

The bands of waste presented under the column entitled 'Tetra Tech Report Estimated waste quantity range (m3)' on Table 1 (provided by you in your information request) were high level volume estimates that were presented in Appendix B ('Zone Profile Summary') of the Tetra Tech Remediation Options Appraisal Report: Mobuoy Remediation Project - Remediation Options Appraisal | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk). As detailed on each of the Zone Profile Summaries, the broad waste volume estimate bands were calculated by multiplying the surface area of each waste zone by the minimum and maximum thickness of waste proven during intrusive site investigations at the site. In the context of the purpose of the Remediation Options Appraisal, it is appropriate to recognise estimates of the potential minimum and maximum quantity of waste present in each waste zone.

As indicated in our response to FAQ 2.6, accurately estimating the quantity of waste at the Mobuoy site has been difficult. This is because waste deposited at illegal landfill sites is, typically, not confined by a regularly shaped engineered cell which then results in an irregularly shaped waste mass. However, the increased number and density of ground investigation locations, combined with the assistance of digital

modelling following the publication of the Remediation Options Appraisal Report, has allowed NIEA to estimate the quantity of waste present at the site with greater accuracy.

Information Request 2 - Clarification on why the site was divided into 9 zones and the basis on which the boundary between each zone was selected.

Due to the large surface area of the site and the variation in the thickness and type of waste within the site, the specific contaminants which pose a risk to groundwater and surface water quality also vary across the site. Subsequently, the risks and the magnitude of the risks posed to the groundwater and surface water environments are variable across different parts of the site.

In recognition of the variability in the severity and magnitude of risks to groundwater and surface water quality, it is appropriate to divide the site into ten smaller sections, referred to as 'waste zones'. The boundary of each of the 'waste zones' was primarily defined by the Potential Contaminants of Concern (PCoCs) identified during site investigation works and follow-on groundwater and surface water quality testing. Section 8.2 of the updated DQRA provides detailed information on the determination of 'waste/source zones': Mobuoy Remediation Project - Detailed Quantitative Risk Assessment | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk).

It is considered that this is the most effective way to remediate the PCoCs which pose a risk to groundwater and surface water at the site.

Information Request 3 - Clarification on the scoring and weighting of each of the remediation options for each zone and 'clarification and amplification around the precise performance metrics used'.

Potential remediation options for the Mobuoy site have been assessed following the guidance presented in Stage 2: Options Appraisal of Land Contamination Risk Management (LCRM), which provides the Regulatory framework for assessing and remediating contaminated sites. Detailed information on the LCRM methodology can be accessed at https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-stage-2-options-appraisal.

A sustainable approach to remediation has been taken and LCRM signposts assessors to further detailed guidance on sustainability – SuRF-UK on the CL:AIRE website (https://www.claire.co.uk/projects-and-initiatives/surf-uk). The Remediation Options Appraisal report prepared by the ICT (Tetra Tech) for the Mobuoy site was prepared following this guidance and reference is made to it within the report.

To clarify, the assessment and scoring of each of the potential remediation options was carried out separately by a panel of three 'competent people' (as defined by LCRM: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-before-you-start#competent).

Each of the competent people were Tetra Tech employees who are remediation specialists. The specialist panel then met to discuss their individual scores and agree a 'moderated' score. It is the moderated score that has been used to inform the Remediation Options Appraisal and copies of the moderated scoring spreadsheets are presented at Appendix C of the Remediation Options Appraisal Report.

You have requested *'clarification and amplification around the precise performance metrics used'*. Appendix 1 of the guidance document 'Supplementary Report 2 of the SuRF-UK Framework: Selection of Indicators/Criteria for Use in Sustainability Assessment for Achieving Sustainable Remediation (July, 2020)' provides information on appropriate 'lines of evidence' that can be used to support qualitative comparison between remediation options.

Under the headline category 'Direct economic costs and benefits' and associated possible individual indicators/criteria, 'direct financial cost', 'future maintenance' and 'discharge of liabilities', lines of evidence used to support the qualitative comparison between options includes initial cost modelling undertaken at RIBA Stage 1, Contaminated Land Remediation Report SP1001 (DEFRA, 2011), industry experience of remediation and earthworks schemes and the sub criteria context presented within the Tetra Tech ROA Report (Section 6.2.3, Table 6-2). The criteria for scoring ensured that each of the options were scored relative to each other with the notes for scoring presenting within the table.

Ethics and equality was included and scored qualitatively based on the ethics of remediation as described within SOC2 of Supplementary Report 2 of the SuRF-UK Framework. In line with the SR2 Framework sensitivity analysis of the sustainability, assessment was undertaken to review how variations in input data and assumptions influence the overall outcome of the assessment and to make sure that each change in input values do not significantly alter the outcome of the assessment.