

**Written Representation - Ridgeway Users Interested Party Reference number:
20048684**

Dear Planning Inspectorate,

Ridgeway Users provide this written representation in relation to the points put forward by Uy Hoang and Jay Jochnowicz during the preliminary meeting between the 5-7th November concerning the application to build a CCS plant by Cory Environmental Holdings Limited (CEHL). In this written representation, we will provide supplementary evidence regarding three key points we brought up during the meeting. References are at the bottom of the document. The following points are only about the quality of the process itself.

1. Additional provisions required for Romani communities to improve access to the planning process and additional mitigation measures as stipulated in Section 149 of the Equality Act. [3]
2. Our findings of the pollutant PFAS (per- and polyfluoroalkyl substances) when testing water & the requirement for additional PFAS testing in line with The Persistent Organic Pollutants Regulations 2007. [2]
3. The requirement for Cory Environmental Holdings Limited to 'justify proposing a design CO2 capture rate of less than 95% as an annual average of all normal operating conditions' as stipulated in Section 3.1 of the Environmental Agency guidance on Post-combustion carbon dioxide capture: emerging techniques. [1]

1 - Additional provisions required for Romani communities to improve access to the planning process as stipulated in Section 149 of the Equality Act.

After hearing testimony from one of the Graziers who discussed how their ancestors had gradually been pushed off the lands by successive developments, Jochnowicz has been following more closely Romani land rights in the area and canvassing opinions in the community as part of his documentary. It is clear that under current provisions, this process fails to meet accessibility requirements and adjustments need to be made. This section will lay out the evidence and background information behind why these changes to the planning process are required and then suggest some of these necessary provisions.

In document 9.2 Section 4.1.41, Cory states: 'Engagement with the graziers, Peabody and TWUL has confirmed that the grazing has always operated under some form of formal agreement, and it is understood that the graziers do not use the land as part of a gypsy way of life – the horses are grazed on the land as a hobby, not for use in travelling or for sale'. This is not only demonstrably untrue given the well-documented and century-long Romani history on the site that is now the nature reserve, but it seeks to unfairly limit mandated engagement with the Romani community to a very narrow group and risks depriving the wider community of their human right to partake in their traditional way of life. Similarly, Cory has failed to address the significance of the site to the wider national Romani community.

Cory also fails to take into account the cumulative effects of the gradual erosion of these marshes and so too the injustice behind these grazing agreements (Rule 6, Annex C, Point 7 Cumulative Effects & Point 6 Cultural Heritage).

Scott Redmond, a Romani activist and fellow Ridgeway user, has submitted a written document testifying to the historic importance and Romani use of this land. The Belvedere marshes were once the largest Romani grazing marshes in Europe stretching across most of the Erith, Belvedere and even Dartford river-bank for miles [4], it is but a tiny fraction of this now. We note a severe lack of provision for engagement with the appropriate stakeholders in regard to its heritage.

The first archaeological excavation of a Romani site in the UK commenced in 2024, despite the community in the UK being over 500 years old. [6] As the largest site of its kind in the UK and in fact all of Europe at one time, this site is likely of underappreciated but nevertheless important archaeological significance. In section 7.2.16 of document 9.2, Cory state: 'It is important that the appropriate heritage stakeholders are the approver for a heritage document' - Romani historians are the most likely appropriate stakeholders but they have not been consulted on this proposal and are thus likely unaware of this scheme. Cory must reach out to appropriate conservation groups and academics with the knowledge necessary to consult on this.

To give some background as to the significance of the site and why Cory's assertion that *'grazing has always operated under some form of formal agreement, and it is understood that the graziers do not use the land as part of a gypsy way of life'* is incorrect, we need to give some further detail.

Between 1895 and the 1950s, these lands on the Belvedere Marshes were largely owned by Romani people. Around 2000 individuals lived there,[28] [4] but they were deemed unsafe and forcibly purchased after the floods of 1953 and slowly built upon - with no/minimal reimbursement to the displaced community. We have seen a gradual erosion of grazing marsh habitats by successive developments, creating unmitigated cumulative effects. Total traveller sites currently constitute no more than 10 acres combined. In the Romani community, there is still huge resentment over this exile and a lack of faith in the planning process - one of the few remaining Romani elders stated: 'You will never stop a development like this, why bother?'

There is precedent for this apprehension. A councillor for Erith once described the Romani living there as *'A blot on the good name of the Earth'*. [4] Erith borough council itself *'instigated a long and protracted battle to evict the 'marsh people'*. [28] There has been a clear desire from local decision-makers to forcibly remove the Romani community from these lands, with sparse meaningful opposition. After the 1953 floods dislodged many Romani, *'the remaining 700 people finally were evicted in 1956'* by Erith Borough council and a further 300 in 1962 in Dartford [28].

David Smith and Margaret Greenfield's book 'The Decline of Nomadism' remarks on the fate of the dispossessed that:

'Others moved onto local caravan sites including that at Jennings Way Bexley, which accommodated those originally displaced during the 1953 floods and the huge Thistlebrook site in nearby Abbey Wood, Greenwich.' (note is now just 40 pitches)

These inhabitants are the descendants of the forcibly displaced. Cory's engagement with the Romani community as part of their planning application must take into account this historic injustice. The current formal agreement which in effect acts as a license to use their own lands is a symptom of the near complete removal and subjugation of Romani agency upon these lands and can in no way be taken as a serious engagement with the gradual erosion of the Romani way of life. No additional permanent sites have been offered by Cory by way of mitigation for their successive developments over these marshes. It should be noted that the Supreme Court in 2023 reaffirmed the Romani right to a traditional way of life and the negative effect injunctions and barriers are having on this right.[8] With the ruling coming in late 2023, new planning applications need to make adjustments to their process.

It is notable that sizeable physical barriers have been put in place (See Figures 1 & 2.) to stop Romani people from resettling any of the remaining marshland according to their traditional ways of life. Reducing grazing pastures only further negates this right but it also feeds into a wider dispossession context that Cory are not addressing. We have included images from Jochnowicz's documentary, featuring Scott Redmond, to show the aforementioned barriers across the Ridgeway and wider area.

The installation of these barriers was mentioned in OUTLINE LANDSCAPE, BIODIVERSITY, ACCESS AND RECREATION DELIVERY STRATEGY: Document 7.9 Section 1.7.2. This document states:

'Travellers are a problem. They accessed the Cory Fields in 2014 (??) via the Norman Road Field gates and caused a lot of damage and expense with fly-tipping of hazardous waste etc. This led to Cory fencing their fields and getting tough on the Norman Road access gates (they own the gates but we own the road). In March 2018, there was a reoccurrence. This time, because they were getting stuck on the wet Cory Field South, they pulled up on our access road. Our bailiffs removed them a week later, but the Norman Road gates weren't replaced until June meaning that there could be no vehicular movement from that end of the site'

We see that this disputed land is part of an ongoing conflict between Cory and Romani communities re-accessing their historic lands. This document acts as evidence that Cory is aware that there is a wider land claim by Romani communities in the area, but they are unwilling to engage adequately with this issue.



Fig 1. & 2. Scott Redmond by barriers on the Ridgeway and wider area - these barriers are mimicked across the marshes and designed to stop caravans resettling the land

Notably, in the quoted section above, calling them 'Travellers' instead of 'Romani' not only confuses two separate ethnicities (Irish Travellers originate in Ireland, whereas Romani originally migrated to Europe 1000 years ago from India and then mixed with local populations) but also in describing these groups as a 'problem' demonstrates the widely used but clearly unacceptably discriminatory language that is both commonplace and goes against a variety of equality statutes. This discriminatory language is present in this planning process and needs to be addressed.

We also consulted with barrister Marc Willers KC of Garden Court Chambers who participated in the previously mentioned 2023 Supreme Court Challenge.[8] He is the go-to barrister for Romani and Traveller rights. He pointed out that Romani people are 'protected under the law to have a right to access their traditional way of life and have fallen victim to both borough and nationwide failure to supply suitable sites.' Cory's development will only make this issue more acute and this needs to be taken into account.

Romani communities are the most disadvantaged minority in the UK.[9] The UK has been found by the EHRC ((Equality and Human Rights Commission) to be repeatedly failing to meet its obligations to Romani and traveller populations. [10] Also mentioned was a complete lack of faith in a fair and non-discriminatory planning system.

When canvassing three Romani sites, we found that not a single respondent was aware of the ongoing plans and nobody from Cory had spoken to the community regarding the development. We already know that Romani engagement has been low. Not a single member of the community has spoken at the meetings, only Scott Redmond has contributed evidence and he only found out about this engagement opportunity through us directly contacting him.

This communication barrier is not surprising. According to a 2018 report by Friends, Families and Travellers submitted to parliament, only 38% of Romani people in the UK have reliable access to the internet in comparison with 86% of the wider population.[5] In addition to this, some local Romani populations have reported the cessation of mail and other necessities to their homes due to a case of cuckooing by crack dealers in one of the sites, leading to the theft of contents from a Royal Mail vehicle on an adjacent street (this cuckooing was something we witnessed first hand). In other words, standard communication and outreach are insufficient to meet access requirements. There needs to be a set of active adjustments to ensure a fair planning process.

There are additional reasons behind the need for active adjustments. Where 59% of all pupils nationally reach satisfactory levels of reading and writing at KS2, educational discrimination including reports of segregated classes means that this rate is at 15% for the Romani community.[7] This planning process is heavily based in dense written legal frameworks - how are we supposed to encourage Romani access to this process without direct and purposeful engagement? Both the UN [9] and the EHRC report on the UK's repeated failure to address an unfair planning system recommend that

'The national strategy to tackle Gypsy, Roma and Traveller inequalities must include a strand on supporting the accommodation needs of Gypsies and Travellers.' [10]

We need appropriate, Romani-guided adjustments and consultations with key stakeholder organisations such as Friends, Families and Travellers who work collaboratively with Romani & Traveller communities and to support their land needs.

There are additional concerns. The site at Jenningtree Way, which sits close to the proposed site is at risk of additional pollutants that will be addressed as part of later sections in this written representation. As a minority with exceptionally high mortality rates [10], Cory need to make further engagement with potential health risks. It should be noted that The Traveller Movement earlier this year submitted a report to the Committee on the Elimination of Racial Discrimination at the UN outlining the right to public health and the UK's failure to address health issues in their communities.[11]

In the Rule 6 document, it is stated that the ExA will conduct all aspects of the Examination with these in mind.

1. Air quality and Effects of construction, operation and decommissioning of the Proposed Development, including any changes to traffic movements, on air quality including on human health and ecological receptors.
6. Effects on non-designated heritage assets within the site
7. Cumulative effects in relation to existing and proposed neighbouring uses.
17. Social effects including on recreation, tourism and enjoyment of the natural environment, including Outline LaBARDS.

It is clear that more needs to be done to properly measure, consult and accommodate Romani communities - this development erodes one of their last remaining historic sites in the area with no consideration of appropriate mitigation or provision for new grazing marshes, new sites or new access. Cory have even published documents containing discriminatory language against Romani people, in violation of Article 14 of the Human Rights Act (1998).

The scope of the planning process itself needs to be expanded to appropriately address the impact of this proposal on the human rights of this group, Cory must be obligated to explore as part of the mitigation process, the provision of new sites for Romani people to graze, live and settle as part of our obligations to upholding their traditional ways of life. They also must consult with key Romani stakeholder organisations such as Friends, Families & Travellers & The Traveller Movement. We also believe remaining Romani sites such as those on Jenning Tree Way should be part of the visit for the inspectorate.

2 - The requirement for additional PFAS testing in line with The Persistent Organic Pollutants Regulations 2007

Earlier this year we conducted a water sample on a ditch that is adjoined to Cory's site, which in official correspondence with Cory's team (See Fig 4. below), was identified as a secondary outflow. We found there to be the presence of PFAS (known as forever chemicals on account of their extreme persistence in the environment) at a total detectable concentration of around 59.1ng/l with several chemicals breaching the individual 10ng/l per chemical limit put forward by the Royal Society of Chemistry [12] - one of these chemicals (PFOAs) fits under POPs regulation or Persistent Organic Pollutants [2]. In response to these findings, we are proposing that further testing must be conducted for PFAS in line with their legal obligations and under Rule 6, Annex C, point 10.[12]

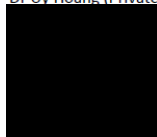
PFAS are linked to a number of diseases including cancers, reduced fertility and cardiovascular problems [13]. Our tests also found the highest concentration of PFAS in a single water sample found in East London since records began.[13] Of note, sediment samples are typically far higher in their results than water samples, but we haven't done this test yet. Below in Fig 3. are the results and evidence of sampling locations/techniques are in Fig 4. And Fig 5.



Certificate Number 24-20048

Issued: 09-Oct-24

Client Dr Uy Hoang (Private)



Our Reference 24-20048

Client Reference ~ (not supplied)

Order No ~ (not supplied)

Contract Title ~ (not supplied)

Description One River/surface Water sample.

Date Received 19-Sep-24

Date Started 19-Sep-24

Date Completed 09-Oct-24

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By



Information in Support of the Analytical Results

Our Ref 24-20048
Client Ref ~
Contract ~

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	holding time exceeded for tests	inappropriate container for tests
2396577	Sample 1 RIVER/SURFACE WATER	16/09/24	GB 1L x2, GV, PB 500ml		
<div>Key: G-Glass P-Plastic B-Bottle V-Vial</div> <div>DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.</div>					

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:
~ Sample details are provided by the client and can affect the validity of the results
* -not accredited.
-MCERTS (accreditation only applies if report carries the MCERTS logo).
\$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report

Summary of Chemical Analysis
Water Samples

Our Ref 24-20048
Client Ref ~
Contract Title ~

Lab No	2396577
Sample ID ~	Sample 1
Depth ~	
Other ID ~	
Sample Type ~	RIVER/SURFACE WATER
Sampling Date ~	16/09/2024
Sampling Time ~	1130

Test	Method	LOD	Units
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Per- and Polyfluoroalkyl substances (
Perfluoro-n-pentanoic acid (PFPeA)	DETSC 3444*	3	ng/l	16
Perfluoro-1-butanesulfonate (PFBS)	DETSC 3444*	3	ng/l	3.3
1H,1H,2H,2H-perfluoro-1-hexanesulfonate (4-2 FTSA)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-n-hexanoic acid (PFHxA)	DETSC 3444*	3	ng/l	17
Perfluoro-1-pentanesulfonate (PFPeS)	DETSC 3444*	3	ng/l	< 3.0
Tetrafluoro-2-(heptafluoropropoxy)-propanoic acid (HFPO-DA)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-1-butanesulfonamide (FBSA)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-n-heptanoic acid (PFHpA)	DETSC 3444*	3	ng/l	8.8
Perfluorohexanesulfonate (PFHxS) (Linear+Branched)	DETSC 3444*	3	ng/l	< 3.0
Dodecafluoro-3H-4,8-dioxanonanoate (DONA)	DETSC 3444*	3	ng/l	< 3.0
1H,1H,2H,2H-perfluoro-1-octanesulfonate (6-2 FTS)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-n-octanoic acid (PFOA)	DETSC 3444*	3	ng/l	13
Perfluoro-1-heptanesulfonate (PFHpS)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-1-hexanesulfonamide (FHxSA)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-n-nonanoic acid (PFNA)	DETSC 3444*	3	ng/l	< 3.0
Perfluorooctanesulfonate (PFOS) (Linear+Branched)	DETSC 3444*	3	ng/l	< 3.0
9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	DETSC 3444*	3	ng/l	< 3.0
Perfluoro-n-decanoic acid (PFDA)	DETSC 3444*	3	ng/l	< 3.0
Perfluorohexanesulfonate (PFHxS) (Branched)	DETSC 3444*	3	ng/l	< 3.0
Perfluorohexanesulfonate (PFHxS) (Linear)	DETSC 3444*	3	ng/l	< 3.0
Perfluorooctanesulfonate (PFOS) (Branched)	DETSC 3444*	3	ng/l	< 3.0
Perfluorooctanesulfonate (PFOS) (Linear)	DETSC 3444*	3	ng/l	< 3.0

Fig 3. Testing conducted by Uy Hoang. He works in public health. We followed general sampling guidance including Nitrile gloves, Tyvek free clothing and followed all guidance from the lab. Note that whilst DETS are not yet ISO accredited specifically for PFAS testing (they are for most other substances), they are in the process of getting accreditation for PFAS testing but this paperwork does take a while. We wanted an accredited lab, but we were turned down on account of being journalists (See Fig 6.).

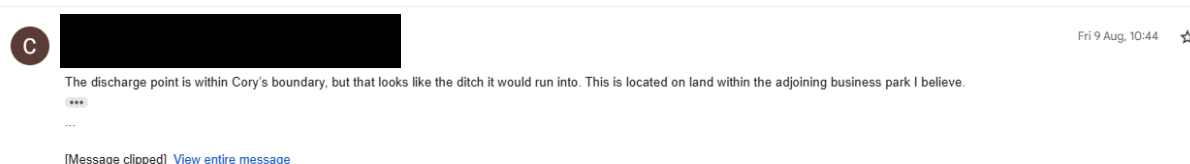
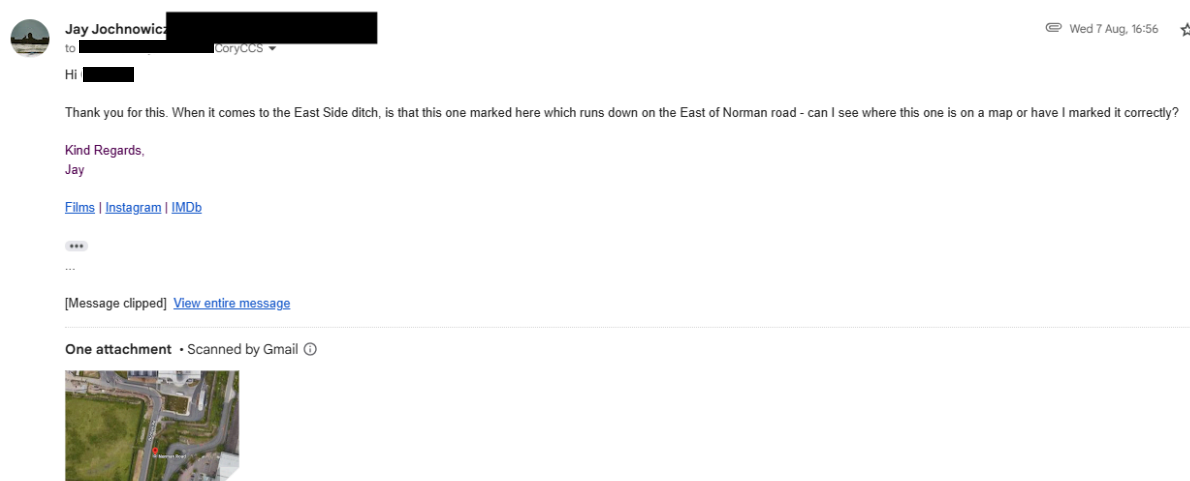


Fig 4. An email from Cory before the sampling occurred confirming that the location sampled is an outflow for rainwater drainage from their roof

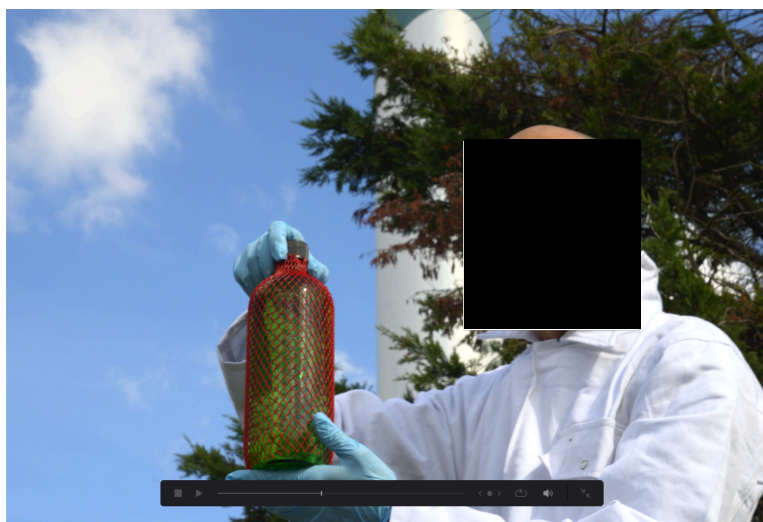


Fig 5. Uy Hoang conducting sampling in the ditch next to Riverside 1 using powderless nitrile gloves making sure to only touch the outside of the bottle as recommended - coveralls contained no Tyvek or any other substance designed to repel water or oil according to guidelines for PFAS sampling.

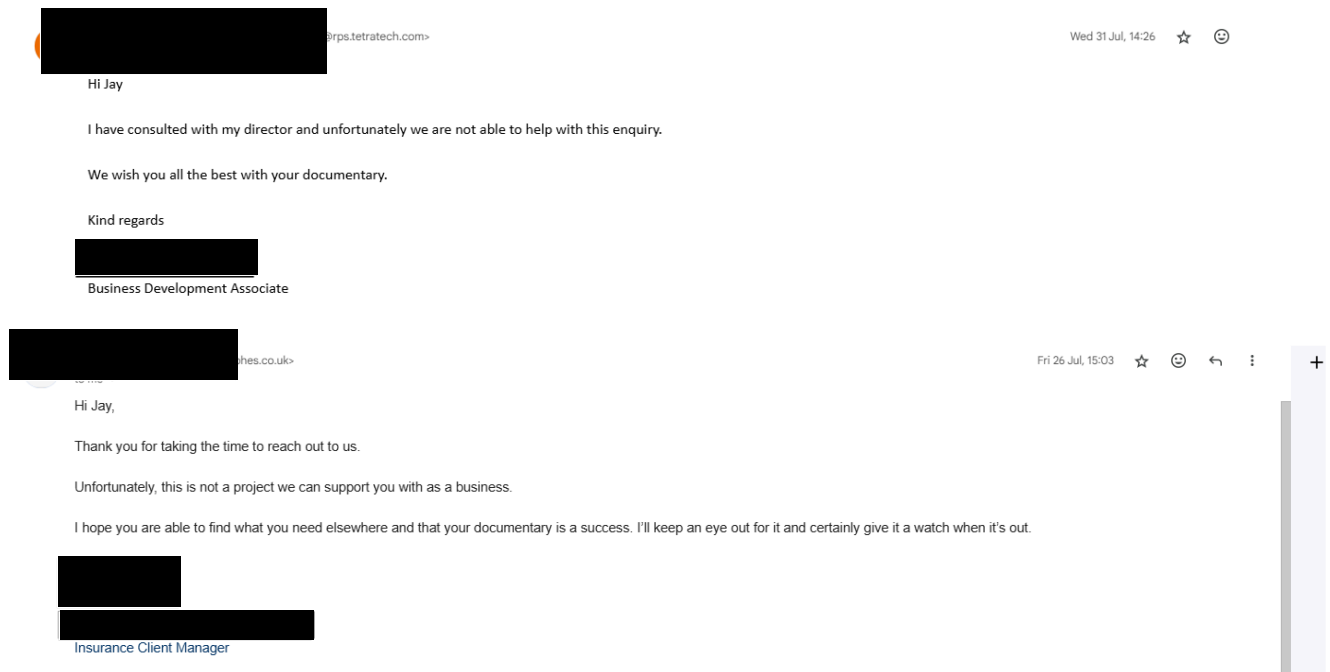


Fig 6. Rejection from testing labs on account of us being journalists - we tried every listed accredited lab but were either rejected or ghosted by them - hence why we picked a lab working towards accreditation instead.

PFAS fall within the scope of the environmental permitting regime established by the Environmental Permitting (England and Wales) Regulations 2016 (EPRs). [15] The EPRs require, amongst other things, that businesses which manufacture or release potentially harmful substances such as PFAS, hold an environmental permit.

Certain PFAS are outright banned as a result of restrictions on the manufacture, sale and use of products containing persistent organic pollutants (POPs). POPs are organic substances that persist in the environment and accumulate in living organisms.[2] The relevant PFAS are perfluorooctane sulfonic acid (PFOS), PFOS derivatives, perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds. One of the chemicals we found the highest concentrations of, (above the proposed 10ng/l limit put forward by the RCS) were PFOAs at 13ng/l. The RCS lists incinerators as a source of PFAS - the incinerators are not hot enough to burn them. [12]

POPs are regulated internationally under the Stockholm Convention and the Aarhus Protocol (the UK is a signatory to both). These international treaties are implemented domestically in the UK by Regulation (EU) 2019/1021 which applies, as amended, in the UK as assimilated EU law. Breaches of this law are enforced under The Persistent Organic Pollutants Regulations 2007 (POPs Regulations). [2]

Additionally, in England, under the statutory regime established under Part 2A of the Environmental Protection Act 1990 for the remediation of contaminated land which causes an unacceptable level of risk [16], local authorities must identify contaminated land. The relevant enforcing authority – which can include the Environment Agency in addition to local

authorities – is then required to ensure that those who are responsible for the contamination in due course remediate it, so that the land is suitable for use.

While liability is, in the first instance, imposed on those persons who caused or knowingly permitted the contaminating substances to be present in, on or under the land, if no such person can be found, liability passes to the current owner or occupier of the site (regardless of whether they were aware of the contamination).

The 2005 contamination event referenced by Cory in their response in document 9.2 section 5.1.26 is over half a kilometre away from the site we tested at and is unlikely to be a cause of this. However, further testing is needed to conclusively confirm whether Cory are a specific source of PFAS pollution as Le Monde and affiliates posit they are [13] and if so, Cory must put in place measures to control PFAS and clean the local environment. This is what we are proposing must be mandated to fulfil these legal obligations under POPs regulations.

There is yet more cause for concern here. As previously mentioned, Cory's Riverside 1 is already listed in a cross-border investigation between Le Monde and 17 partners as a potential source of PFAS. [13] Carbon capture also uses PFAS. In fact, The International Association of Oil & Gas Producers have been asking for exemptions for PFAS, in particular fluoropolymers from restrictions because of their importance in the CCS chain. [14]

This ties in with a quickly evolving international regulatory environment. Cory's planning permission seeks to assert longevity of around 50 years, but already this year we have seen the US limit PFOAS to 4ng/l and the EU is preparing to phase out all PFAS.[17] DEFRA is in the process of conducting an ongoing investigation into PFAS and this may have an effect on policy going forwards. [18] This makes asserting baseline levels of PFAS/POPS emissions all the more important, especially given the obligation to tackle health inequalities in vulnerable local communities as outlined in Rule 6, Annex C, Point 1 & 10 of this submission.

When we asked Cory whether they tested for PFAS emissions in their local environment, they confirmed that they did not (See Fig.7 below). We asked if we could test their outflows on their site and they refused to give us access. Cory are proposing to undertake construction adjacent to a site which burns substances containing PFAS (household waste), to build a facility which captures this CO₂ in part using PFAS and yet we have no mandated baseline testing to compare for future levels and we have not been given permission to undertake any testing off our own backs.

to me, [redacted] Cory CCS

The locations of the soil testing are as follows:

Site ID	Site Name	Site Details
1	Thames Cycle Path	TQ 48156 81329, area to north of Lytham Close
2	Green Chain Walk*	TQ 47398 80353, area to south of Whernside Close
3	Lesnes Abbey Woods	TQ 47702 78490, area to south of Woodland Way
4	Ingrebourne Hill	TQ 52628 83533, area to southwest of Albyns Farm
5	Havering Riverside	TQ 51561 80142, area to south of Coldharbour Lane

The soil is tested for:

- ▶ Dioxins and furans: 2,3,7,8-TCDD; 1,2,3,7,8-PeCDD; 1,2,3,4,7,8-HxCDD; 1,2,3,7,8,9-HxCDD; 1,2,3,6,7,8-HxCDD; 1,2,3,4,6,7,8-HpCDD; OCDD; 2,3,7,8-TCDF; 2,3,4,7,8-PeCDF; 1,2,3,7,8-PeCDF; 1,2,3,4,7,8-HxCDF; 1,2,3,7,8,9-HxCDF; 1,2,3,6,7,8-HxCDF; 2,3,4,6,7,8-HxCDF; 1,2,3,4,6,7,8-HpCDF; 1,2,3,4,7,8,9-HpCDF and OCDF.
- ▶ Metals: antimony; cadmium; chromium; cobalt; copper; lead; manganese; mercury; nickel; thallium; tin; vanadium; zinc and metalloid arsenic.
- ▶ PAHs: acenaphthene; acenaphthylene; anthracene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(ghi)perylene; chrysene; dibenzo(ah)anthracene; fluoranthene; fluorene; indeno(123-cd)pyrene; naphthalene; phenanthrene; pyrene, Total PAHs.

The results are shared with the EA – if you have any questions about the limits which they set then please contact them directly. We also perform the analysis in winter and in summer to negate any seasonal variation, which was above and beyond the initial requirement from the EA and is consistent with our principles of continuous improvement when it comes to environmental monitoring. As mentioned previously, if we are in any breach of the limits set by the EA then we will not be able to operate.

The water discharge points are:

1. off the site Jetty into the River Thames (this is for rainwater from the northern roof).
2. into the ditch that runs on the east side of the site within Cory's site boundary (this for water from the southern roof).
3. Into the ditch on the west side of Norman road (this is for surface rainwater from the road network).

Hi Jay,

I've had a further conversation with our engineers at Riverside and they have confirmed the following:

We have no discharge to sewer from site; all process water remains on site and is reused so no monitoring is required by our permit.

However, we do discharge uncontaminated roof and surface (rain) water. The requirement for this, as stated in our permit, is a monthly visual check for no oil or grease at the three discharge points.

We have had bi-annual soil monitoring performed at five agreed locations in the vicinity of Riverside since before the site was operational. The following is taken from the most recent report:

"Soil chemical data obtained since the RRRF plant became operational in March 2011, do not indicate a clear comparative change to data obtained from previous monitoring occasions, prior to the RRRF plant being commissioned."

You can also find all our ISO certification on the Cory website here: [ISO certificates | Cory Group](#)

...

Fig 7. Cory confirming they do not test their outflow water samples & do not test for PFAS

Due to our own test findings, there is evidence of a legitimate concern as to the presence of POPS in Cory's outflow. We feel this evidence should be considered under Annex C principal issue 10 - Geology, hydrogeology, soils, materials and waste. We believe that Cory are obligated at the very least to measure PFAS across its local area or give us access to conduct these tests. If these are found to be at unsafe levels - they must decontaminate and adapt procedure to avoid these emissions going forwards, in line with their legal obligations with the Environment Agency.

We also believe that these tests should be used to provide a baseline as part of their environmental permit to carefully monitor PFAS locally in relation to their proposed Carbon Capture facility. The inspectorate may wish to visit these outflow sites as part of their visit.

3: The requirement for Cory Environmental Holdings Limited to ‘justify proposing a design CO2 capture rate of less than 95% as an annual average of all normal operating conditions’ as stipulated in Section 3.1 of the Environmental Agency guidance on Post-combustion carbon dioxide capture: emerging techniques.

Our third point is in regards to Cory’s claim made in their planning submission that they seek to achieve 95% Carbon capture rates. Under section 3.1 of CCS planning guidance [1], guidelines state:

‘You should aim to design your plant to achieve a CO2 capture rate of at least 95% during normal operating conditions, although operationally this can vary, up or down.’

You will need to justify proposing a design CO2 capture rate of less than 95% as an annual average of all normal operating conditions. You can submit a cost-benefit analysis as part of your application.’

Cory is claiming to seek to achieve 95% CCS rates. Given the guidance above and the criteria of Rule 6, Annex C, point 16 (Planning Obligations), this is unlikely to be coincidental. We argue that the data behind this is questionable, the maths does not add up and thus Cory needs to, as part of this process, justify their inability to hit 95% or provide further evidence as to how this will be achieved.

According to a 2023 study by IEEFA (Institute for Energy Economics and Financial Analysis), no commercially operational facility they could find has achieved greater efficiency than 78% [20] and the technology Cory is proposing to use contains no radical departure from previous methodologies - in fact, some of the schemes within IEEFA’s research such as Petra Nova are even cited by Cory in appendix 4.2.1.2 of document 9.2. Whilst it is possible that the planning guidance in question is ill-advised in requiring unattainable targets, Cory must follow the guidance that exists.

Cory initially claimed they would sequester 1.3 million tonnes of CO2 annually by 2030. [21] Their current plant, Riverside 1, after burning 800,000 tonnes of rubbish in 2023 produced 854,000 tonnes of CO2.[22] We know their combined output will be around 1.5 million tonnes of rubbish once they are both open. [24] Assuming the same efficiency, this would be equivalent to 1.6 million tonnes of emissions. We know Riverside 2 will be more efficient but to reach the 95% quota it would have to be roughly 45% more efficient than Riverside 1. There is no suggestion in any planning documents for Riverside 2 that it will achieve this. The burden of proof falls on the applicant (Cory).

Following this, Cory bumped up their initial estimations to 1.4 million tonnes sequestered [23], but it is not explained in any detail how they came to this uprated estimate. This would still fall short of the 95% required.

The evidence points on the balance of probability to them needing to take into account the likelihood they will not achieve 95% CCS rates. If they are to follow guidance, they must provide reasoning behind why they have significantly uprated these percentage estimates to

significantly beyond what any operational CCS plant has achieved. When using real-world examples, The Shell CANSOLV CCS technology that Cory have signed a contract to use has been piloted in Canada, achieving 40% CCS capture rates at one facility and 22% at another. [27] The burden is always on the applicant in cases such as this.

In document 9.2 appendix 4.2.12 Cory now state that they will sequester 1.6 million tonnes - this figure has not been explained, let alone independently verified by a third-party or peer-reviewed. This represents the second drastic uprating without any comprehensive change to the scheme itself. These are large upratings too and cannot be achieved by small tweaks. It is completely unclear as to how they have uprated these estimates so drastically. Higher carbon capture rates also require far more energy and due to diminishing returns, can actually worsen other measures of efficiency. [25]

Cory uses the American Petra Nova scheme as evidence that they can sequester 1.6 million tonnes of CO₂ in this same appendix to demonstrate that they will be meeting these guidelines (4.2.12). Coal is similar in its CO₂ output to EfW per kWh of energy and thus the flues will be similarly carbon-rich making capture easier. [25] However, Petra Nova only achieves 73% capture rates from flue gas and 55-58% from total power, if we include the power used in sequestering the CO₂. [20][26] To make matters worse, Petra Nova closed for three years shortly after opening due to profitability failures in the scheme and missing targets on CCS [19].

Here Cory are confusing total carbon capture volumes with carbon capture percentages and these are quite clearly not the same measures. These are extremely basic mistakes. This demonstrates the unacceptably low quality of evidence being used to back up Cory's claims to avoid falling foul of guidelines and planning obligations. In fact, the evidence seems to back up the points we are making - yet Cory are citing them all the same and simply hoping we do not have enough time to read them properly.

Cory must properly explain their workings out across the total carbon capture chain and justify this to the planning board if they are to correctly satisfy the criteria set out by the Environmental Agency's planning guidelines [1], offering a comprehensive explanation of their drastic upratings - we ideally want to see third-party verification on this. If wishful hopes and dreams are enough to satisfy a planning board that they don't need to fulfil certain criteria or that they have done their calculations correctly, then this brings the process into disrepute. It in effect opens the door to a host of wishful carbon capture schemes with little benefit and grossly uprated capture rates. It also puts the reputation and accuracy of the UK's projected carbon calculations at risk.

We have already seen in two written representations from James Hewitt and an independent CCS consultant hired by Munster Joinery that argue that Cory has appeared to grossly overestimate the amount of land needed for the project. The larger capacity Petra Nova for context only uses three hectares of land - Cory claims they will use eight hectares - it is noted that with three hectares they would not need to purchase any nature reserve.

We are concerned more broadly that so much of Cory's submitted evidence: whether on Romani land usage, Carbon Capture efficiency or necessary space for the development appears to either be misleading or not fully evidenced when cross-checked with independent

third parties, secondary sources or even when we check their own listed sources. This needs to be reviewed urgently.

Closing Statements

We hope that the aforementioned evidence satisfies the planning inspectorate. Please do not hesitate to reach out for further clarification on any issues within this written representation.

Kind Regards,

Jay Jochnowicz & Dr Uy Hoang on behalf of the Ridgeway Users Community Group

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