

This document is intended to support the understanding of the disclosed documents and data, which include materials that are already in the public domain as well as those yet to be released. For background, these disclosures specifically relate to the northern university's investigations (Newcastle, Hull, York, Durham), funded by the Fishmongers' Company and in association with the North East Fishing Collective. The disclosed information is as follows:

1. Interim North East Fishing Collective Investigation Report v 1.3 (September 2022)
2. Reanalysis of MMO landings data for north east ports
3. Toxicity of pyridine to *Cancer pagurus* preprint and associated data
4. Environmental pyridine data for Tees water and sediment
5. Possible point sources of pyridine input to Tees waters
6. Impacts on Staithes barnacle population (Natural England MarClim long term monitoring site)
7. Ongoing and near-term research plans

Folder	File
Interim North East Fishing Collective Investigation Report v 1.3 (September 2022) 1. Interim NEFC Investigation Report	This folder contains the interim report that was submitted as evidence to the EFRA Select Committee. Additional data have been collected since this, e.g., further pyridine exposure concentrations (presented in folder 3) North East Research Group October 2022 Report final (1).pdf
Reanalysis of MMO landings data for north east ports 2. Reanalysis of MMO landings data for north east ports	This folder contains a Powerpoint presentation outlining our current progress in reanalysing the MMO landings data (lobster) for north east ports. The original Inshore Fisheries and Conservation Authority (IFCA) report was misleading as it did not distinguish between inshore and offshore vessels, and it inappropriately included visser vessels landings data (fishing many miles offshore for several days at a time, but landing their catch in NE ports) – this created a false impression of the recovery of the fishery. Durham data 061222.pptx We also provide the data and R-code should the Expert Panel wish to explore some of the analysis themselves. Durham data and code 051222.zip
Toxicity of pyridine to <i>Cancer pagurus</i> preprint and associated data 3. Toxicity of pyridine to Cancer pagurus preprint and associated data	This folder contains our draft manuscript that was deposited in a preprint repository (https://www.biorxiv.org/content/10.1101/2022.11.17.516169v1). At the time of writing (Dec 7 th), the manuscript has yet to be submitted for peer review as we are awaiting the pyridine data for the exposure water and tissue body burden (due next week) Manuscript deposited in preprint archive.pdf We also provided the manuscript's supplementary materials Manuscript supplementary 1.docx , including the animation of the modelled pyridine plume Manuscript supplementary 2.mp4 The raw data for the pyridine exposures are also provided Copy of Cancer pagurus pyridine raw data - Newcastle University - 071222.xlsx
Environmental pyridine data for Tees water and sediment	This folder contains the pyridine analysis for Tees water and sediment undertaken by York University. All the sediment samples

<p>4. Environmental pyridine data for Tees water and sediment</p>	<p>are surficial, with none coming from a depth greater than 20 cm. The samples were taken 7 months after the start of the mass mortalities. We have repeatedly requested permission to sample the deeper sediments using a vibro-corer, but all of our requests have been ignored. We have also offered to cover the costs of the sampling and analysis.</p> <p>We provide the chromatograms Pyridine sediment results - chromatograms.pdf the raw and processed data Pyridine Sediment Results raw and processed data.xlsx and we also provide the raw mass spec data should the panel choose to undertake their own analysis. 220916 Sediment MDLs.zip</p>
<p>Possible point sources of pyridine input to Tees waters 5. Possible point sources of pyridine input to Tees waters</p>	<p>In this folder we provide background context to three probable point sources of pyridine release into the Tees. This evidence was compiled through a combination of local knowledge, FoI submissions, and whistle-blower reports. The three main sources are ICI (historical and less likely to have a material effect on the 2021 mass mortalities), Vertellus Specialty Chemicals which was manufacturing pyridine and pyridine derivative on their Tees site, and SSI and Redcar steelworks, producing pyridine as a by-product of coking. Possible sources of major pyridine input to Tees regional waters.docx</p>
<p>Impacts on Staithes barnacle population (Natural England MarClim long term monitoring site) 6. Impacts on Staithes barnacle population (Natural England MarClim long term monitoring site)</p>	<p>This folder contains evidence submitted to the EFRA Select Committee. It shows that the barnacle population at the Staithes site (Natural England MarClim) which is roughly midway along the modelled plume trajectory, was all but eliminated. The sites immediately to the north and south were unaffected. At time of writing, we haven't had the time or resources to analyse the data for the numerous other taxa that we monitor for, however cursory examination indicates progression towards ecosystem collapse/regime change. Staithes Barnacle Data.docx</p>
<p>Ongoing and near-term research plans 7. Ongoing and near term research plans</p>	<p>This folder contains information on current research activity and that planned for the coming three months. Ongoing and near term research plans.docx</p>