Farm Engagement – Excess Phosphorus Removal & Nutrient Management – FAQs living document

1) How will this nutrient management of slurry process benefit my farm?

To sustain livestock numbers in Northern Ireland, it's vital to improve environmental practices in nutrient use and reduce the carbon footprint. A centralised processing model using anaerobic digestion and slurry separation can address greenhouse gas emissions and nutrient excess while supporting resilient, profitable farms for future generations. This approach replaces fossil fuels with renewable biogas, cuts nitrogen losses, and lowers fertiliser costs, enhancing farm resilience and compliance with environmental standards. Effective nutrient management also helps farmers meet regulatory requirements and demonstrates commitment to sustainable agriculture.

2) Is there a cost to this process? Is there a value attributed to these solids?

There is a cost to process the slurry and recover nutrients therefore we see no positive value being attributed to any solids being removed off farm in the initial phase prior to maturation of the concept. In order to be compliant DAERA and NAP policy have expressed a preference that slurry will have no trading value and may become a regulated waste stream from farm. However, this is something that will be kept under review and may change in the coming years.

3) What's in it for the Mid Ulster group?

The Mid Ulster Group are the service providing entity for nutrient, energy and carbon recovery services. The group acknowledges that slurry processing has limited monetary value to the farm enterprise currently. That said, we wish to develop and break into new emerging markets as and when they arise to be able to potentially relay a value back to the individual farm business, this may be in the form of new added value products developed. To get to this stage, we need to work with you, the farmer, to help us unlock these markets initially and begin to work out a full benefits model return.

4) Do my tanks need to be mixed pre-separation process?

Yes, your tanks need to be mixed to ensure no crusting of the slurry within the tank. This way the solids are evenly distributed throughout the liquid allowing for maximum solids and phosphorus removal.

5) Who operates the separator, is this operated by a person from the service company?

The separator will be operated by a "registered competent" member off the service company who will have undertaken all relevant training procedures and will adhere to health and safety protocols outlined by HSENI.

- 6) Do you need additional services to be available at farm electricity, gas, water etc? The separator will be self-sufficient in terms of electrical power and diesel requirements.
- 7) Do I (the farmer) need extra infrastructure on my farm i.e. additional empty tanks for the liquid slurry to be returned to?

No additional capital infrastructure is needed for this service. The liquid from the separator can return to the manure tank, though efficiency improves if it goes to an empty tank. The separation unit can pump to an empty slurry tank or an aboveground store's reception tank.

8) What access do you need to my farm and slurry tanks?

Access requirements to the farm and slurry tank will focus on the location of a 36ft separator platform unit and a receiving trailer of either 20 or 40ft long. The separator platform is equipped with load conveyors to transit the solid material from the separation process to the waiting trailer.

9) Expected frequency of visits to farm?

The frequency of farm visits will depend on livestock numbers, slurry tank size, and nutrient export needs. The service company will work with the farmer on an individual basis and will provide this information. The service is most effective when slurry tanks are not completely full, enabling a viable collection schedule.

10) Liability around operation of separator?

Operation of the separator and liability will be that of the service company.

11) How long will you be on my premises?

The length of time on the premises will be dictated by the amount and consistency of slurry to be processed. The separator platform will comfortably process between 100 - 175m³/hour (22,000 - 38,500 gallons/hour).

12) Will you notify me before arriving to farm and approximately how much notice will be given?

Yes. Farmers will receive advance notice (preferably 3-5 days), initially in person and later via digital notification (sms/whatsapp/email). This allows them to address tank access, mix the tank, confirm biosecurity, and ensure no farm activities (e.g., cattle testing or silage making) interfere with the separation process.

13) Do all livestock need to be removed from the house during the separation process? Livestock removal is at the farmers discretion. However, livestock can remain in the house during separation if conditions/circumstances are deemed safe. The separation platform, operated outside the cattle house in line with HSE's "SAFE" standards, will not affect the livestock, though good ventilation is advised. Operators will use personal H₂S monitors, and livestock handling remains the farmer's responsibility.

14) Can you still process my slurry if I have TB?

Slurry can be processed from farms that have TB reactors in it as the separator washdown process will ensure no spread of disease from one farm to the next.

All separated solids are transferred directly from the farm to the biorefinery/AD for further processing.

15) What happens to the chemicals from equipment washdown?

Washings from the separator equipment (800-1000 litres) can be disposed of to your dirty water yard tank or can go back into your slurry. The washings will be water and DAERA/ DEFRA approved disinfectant chemical wash.

16) Can you add any additives to my slurry?

It is anticipated that benefits/value of additives will be explored during this project with the infrastructure in place to dose separated slurry if required.

17) Once separation process is complete and solids are removed, do you provide the farm with evidence of slurry and nutrient export documentation?

Yes. Within our legitimised separation service and nutrient management package we will be able to provide you with documentation on the quantity, analysis and destination of your nutrients in compliance with Nutrient Action Plan requirements aligning with waste duty of care code of practice

18) Can you take my solids away if I separate myself?

To ensure nutrient flow effectiveness, on-site separators at farms or AD facilities must align with our centralised biorefinery process. Subject to registration/licensing separators and operators should be acceptable, and solids must be tested for suitability on a case-by-case basis. Consistent quality in separation is essential, and our team can collect samples to verify compatibility with our biorefinery.