Kellie Burston

From: Kellie Burston
Sent: 17 November 2021 14:39
To: Dunmore, Katie
Subject: RE: Daneshill STF - email queries response

Afternoon Katie,

Thank you for your email – please see below our response, do not hesitate to give me a call/drop me an email should you require any further detail

Thanks for the additional information. Could you clarify the finer detail for the off-site transport of the picked asbestos pieces. You state the contents in transported to Winterton Landfill please clarify how. Is the entire skip taken or the contents moved? in what vehicles? provide details of control measures etc.

The sealed and appropriately labelled asbestos skip will be picked up by a registered skip vehicle (or similar) and then delivered to the Winterton Landfill site (or other suitable permitted disposal sites) for asbestos disposal. All asbestos waste movements/handling will be managed in accordance with the duty of care requirements and provided with a Hazardous Waste Consignment Note, to ensure the safe management of waste to protect human health and the environment. All relevant documents (e.g. consignee returns/records of rejected loads) and copies will be kept for 3 years.

With regards to the use of EWC 19 05 03 as biofilter medium. You described this as oversize compost however the material coded under EWC 19 05 03 can be highly variable and odorous. It may also contain a lot of plastic and contrary material which could affect its efficacy as a filter medium.

BAT is to install a biofilter however for the reasons above I don't believe the use of waste material constitutes BAT. Why have the usual non-waste materials not been chosen for the biofilter? Has the Air Quality Impact Assessment been specifically modelled using EWC 19 05 03 as a filter medium?

The biofilter medium (of EWC 19 05 03) will be brought over from an FCC's composting facility where it is produced. The biofilter medium will be specifically produced as a biofilter and put through a trommel to remove any non-compostable inclusions such as litter and plastic and then brought to Daneshill STF. At Daneshill Landfill, the oversize compost is hydrated and a small amount of ammonium nitrate is added to increase the available nitrogen to approximately 100mg/kg to ensure that the medium is supportive of microbial proliferation once there are effluent gases passing through the biofilter; it is then sampled to ensure that the critical operational parameters are within the optimal range and covered with a tarpaulin to retain its moisture content and reduce the potential for any particulate and odour emissions.

It is considered that the use of EWC 19 05 03 as a biofilter medium shows beneficial advantages when compared to the purchase of PAS compost, which has been found to result in back-pressure due to the fine material content. Previous experience by the Operator on smaller mobile and containerised operations do not provide the capacity that is required at Daneshill Soil Treatment Facility. The use and design of EWC 19 05 03 as a biofilter medium has been modelled in the Air Quality Impact Assessment based on monitoring data from another site using the same design and the Operator will ensure that all monitoring is undertaken and control measures are in place to confirm that the biofilter is maintained within its optimal range (e.g. moisture content, pH, available nitrogen, particle size etc) and the release of fugitive emissions is minimised. The use of EWC 19 05 03 as a biofilter medium is already carried out by the Operator at similar sites, where proven monitoring results has shown the use of EWC 19 05 03 to be effective with negligible fugitive emissions.

Kind Regards
Kellie

From: Dunmore, Katie <katie.dunmore@environment-agency.gov.uk>
Sent: 08 November 2021 11:04

To: Kellie Burston <KellieBurston@Caulmert.com>
Cc: James Cook <james.cook@fccenvironment.co.uk>; Andy Stocks <AndyStocks@caulmert.com>; Jon Owens <Jon.Owens@provectusgroup.com>
Subject: RE: Daneshill STF - email queries response

Hi Kellie,

Thanks for the additional information. Could you clarify the finer detail for the off-site transport of the picked asbestos pieces. You state the contents in transported to Winterton Landfill please clarify how. Is the entire skip taken or the contents moved? in what vehicles? provide details of control measures etc.

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BAT is to install a biofilter however for the reasons above I don't believe the use of waste material constitutes BAT. Why have the usual non-waste materials not been chosen for the biofilter? Has the Air Quality Impact Assessment been specifically modelled using EWC 19 05 03 as a filter medium?

I'll need to take advice from my biowaste lead with regards to the biofilter as I've not seen waste materials described before. I therefore may have additional questions. In the meantime however please respond to the above.

Kind regards

Katie Dunmore
Permitting Officer
National Permitting Service ♦ Part of Operations – Regulation, Monitoring and Customer

✉ Environment Agency, Horizon House, Deanery Road, Bristol, BS1 5AH
☎ 02030 254435 *(internal 54435) mob: 07584 369561*
8 katie.dunmore@environment-agency.gov.uk

From: Kellie Burston [mailto:KellieBurston@Caulmert.com]
Sent: 05 November 2021 08:53
To: Dunmore, Katie <katie.dunmore@environment-agency.gov.uk>
Cc: James Cook <james.cook@fccenvironment.co.uk>; Andy Stocks <AndyStocks@caulmert.com>; Jon Owens <Jon.Owens@provectusgroup.com>
Subject: Daneshill STF - email queries response

Good Morning Katie,

Please see below our response to your email queries regarding Daneshill Soil Treatment Facility. I have also attached a revised Site Layout Plan, drawing reference; 3982-CAU-XX-XX-DR-V-1807_S2-P04 and an updated Odour Management Plan, document ref; 3982-CAU-XX-XX-RP-V-0308.A0.C3. I have also provided a document link below for the Odour Management Plan:
https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:a4afb6fa-676a-4985-8836-b3c9ad7c476f

Q2. What are the surface drainage arrangements for the non-operational areas of the site? Where is the surface water channelled?

The Surface Water Management Plan for the site indicates that surface water arising from this area of the site flows towards the "SW lagoon" located close to the site entrance which then discharges to the ditch on the western perimeter of the landfill which is monitored under the permit at SW04 and is an authorized discharge point from the site.

Q15. How does the bagged asbestos get into the skip? For instance are chutes used or do operatives carry the pieces and place in by hand? Where is the skip? The plan indicates the location of the picking station, is it below?
The skip is located next to the picking station and is kept locked. The double bagged ACM debris is manually taken out of the picking station and placed in the lockable skip. The Site Layout Plan has been amended – please see attached.

Q22. Please clarify the new treatment pad layout plan 3982 which shows an asbestos control zone, screener and picking booth across all 3 pads. I understood pad 3 coloured purple was to be used solely for asbestos treatment with 1 and 2 for bioremediation. I note the response to Q22 confirms there will be no screening of hydrocarbon contaminated soils. Please clarify if asbestos works are to be carried out across all three pads.
bioremediation. I note the response to Q22 confirms there will be no screening of hydrocarbon contaminated soils. Please clarify if asbestos works are to be carried out across all three pads.
Please see updated Site Layout Plan. No screening of hydrocarbon contaminated soils will take place as this is not needed prior to treatment. At the end of biotreatment when the soils are non-hazardous and meet the reuse criteria for the restoration/landfill area they may be screened using a separate two-way screen to ensure that the physical nature of soil is suitable for its final use.

Flexibility will be required across the process to accommodate local market demands which may include the use of different pads for asbestos treatment, albeit the most likely scenario is that the treatment facility is built in phases.

The rationale behind the design is that areas that are linked to the biopile treatment equipment (Pads 1 and 2) would be used for biotreatment and where there is spare unused space could also be used for asbestos picking (within the picking unit) and screening using the existing segregation approach for supervised soil reception to prevent any mixing of waste soils. Pad 3 will be used for asbestos picking and screening, however, this pad is unlikely to be developed immediately following permit issue and will be subject to market demands. The ratio of soils with hydrocarbon contamination and asbestos contamination is very variable and so it is impossible to state exactly what treatment will be applied on Pads 1 and 2 at any one time in the future other than through general principles highlighted in the drawings. The proposed soil reception approach has been used on other sites , with robust, proven waste acceptance procedures implemented to ensure there is no mixing of different soil types. All drivers are given strict instructions, and clear signage coupled with supervision of the unloading of all loads by a trained operative. Once reception/soil verification testing has confirmed the suitability of the soils to be accepted at site, the soils are placed into separate soil treatment batches for biotreatment or asbestos treatment.

Following on from my previous email could you also clarify point 24 on the Schedule 5 response. Its noted 30m3 of wood will be stored. The location however is not included on the plan. The location of the ammonium nitrate it noted. You haven't mentioned off-spec compost - 19 05 03 or street cleaning residues - 20 03 03 accepted as a separate waste stream, are these no longer proposed for inclusion into the bioremediation process?
Following a further review of the street cleaning residues (20 03 03) the applicant no longer proposes to accept this material and so this code can be removed from the waste list.

The oversize compost will <u>only</u> be used in the biofilter which is fully contained. The applicant has previously trialled this material in soil treatment and found it unsuitable as it is too large to be fully degraded within 8-12 weeks and may have a residual biochemical methane potential. Therefore this will not be accepted for treatment.

Organic additive such as woodchip maybe added at ~1-3% to clayey soils to break up the cohesive nature of the soils and aid aeration, however usage is not expected to be significant. The smaller size untreated woodchip will be stored next to the receiving batch of soil (see updated plan) so that once the soil is placed on the treatment pad, nutrients (ammonium nitrate) and organic nutrients (woodchip) can then be added to facilitate the biological degradation of the hydrocarbon compounds. Woodchip is only added when the soil is cohesive; so not to every batch. The 30m3 limit is based upon the size of each load that is delivered when required.

I note there is not a stable, non-reactive cell at Daneshill. Where will the asbestos fragments picked from soils be disposed of? If transported offsite please provide details of the measures in place to prevent emissions including how waste will be transported – for example will the entire skip and its contents be removed from site?
The contents of skips will be taken to a suitably licensed hazardous waste disposal facility. It is likely to be taken to FCC's Winterton Landfill Site which is permitted to accept asbestos waste for disposal.

Regarding your Schedule 5 response to question 24. You state the biofilter will be formed of off spec compost 19 05 03. The OMP however states the biofilter will be woodchip. It's not clear if this is waste woodchip. Please clarify this with your response to my earlier query regarding waste materials and their use.

The Operator has confirmed that oversize compost will be used in the biofilter medium – woodchip will no longer be used due to the impact on air flow and reduced life on the filter medium. The Odour Management Plan will be updated to reflect this change.

I hope this answers you queries, please do not hesitate to get in touch should you require further clarification

Kind Regards
Kellie

Kellie Burston	Caulmert Limited
Senior Environmental Consultant	Mobile: 07494 170 309
KellieBurston@Caulmert.com	Direct: 01773 305 048
www.caulmert.com	Phone: 01773 749132

Nottingham Office • Strelley Hall, Main Street • Strelley, Nottingham • NG8 6PE • United Kingdom