
Application for Permit Variation

Permit N° 53997 (New Tip)

Document NTPV 01 (C2)

Pre-application discussions with the Environment Agency

Section M

- Technical response provided by Urban Springside Ltd. to Environment Agency response 20th February 2019' (item 2 only).

*Contaminated Land
Air Quality
Environmental Audit*



Partnership No: OC 300776

Our Reference: R1635-L10 20190221 sgp-ea new tip surrender 1
Your Reference: EPR/CB3508TP/T001

21st February 2019

Helen Gregory
Environment Agency National Permitting Service
Sapphire East
550 Streetsbrook Road
Solihull
West Midlands
B91 1QT

By e-mail: Helen.Gregory@environment-agency.gov.uk

Dear Helen

New Tip Surrender Springside Mills (EAWML 53997), Belmont: Assessment Proposals

Background

In reference to email to Darrel Woodrow "Urban Springside", dated 20th February 2019, I am writing to provide information and proposals in relation to Item 2 only.

We understand Urban Springside Ltd (US) are currently making application for New tip Permit Variation to remove and retreat the wastes present. Once this operation is complete, Smith Grant LLP's (SGLLP) acting as independent consultant and ground investigation contractor will be to obtain and interpret the information required to support a surrender application.

I note your requirement that ground investigation data will be required following removal of the liner system and your advice to seek pre-application support as to the level of evidence that will be required for the subsequent surrender. In consideration of this we have produced a scope of works for discussion.

I have briefly summarised the previous proposals for assessment of the New Tip area following removal of wastes (that were made in the context of the wider reclamation proposals for the New Tip when Planning Consent was sought), and what comments had already been received from the EA contaminated Land and Groundwater officers in response to these.

I have also reviewed the more general requirements in respect of a standard surrender within the specific context of the New tip activities (which comprise the removal of the wastes and therefore divert somewhat from the more usual requirements to demonstrate stabilisation of the site through assessment of emissions from retained wastes during degradation of passive control measures).

In consideration of these, a set of proposals to demonstrate the residual contamination status and pollution potential of the New Tip area *following implementation of the proposed variation* are presented for your consideration and comment.



Previous Recommendations and Environment Agency Comments

Two reports concerned with the wider restoration of the New Tip (rather than the surrender process specifically) were produced and submitted as part of the Planning Application for remediation and restoration of the New tip in 2012:

- Restoration of the existing "New Tip" (EA Environmental Permit No. 53997) at the former Springside Mills Site, Belmont – Method Statement for the Restoration of the "New Tip" Area (dated November 2012 Rev B) prepared by John Bamforth, and;
- Restoration of the New Tip at the Former Springside Mill Site, Belmont -Environmental Review & Mitigation Proposals for Urban Springside Ltd by SGP (Reference R1634-R04 & USS MS 2012 Rev D).

The US Method Statement is largely concerned with the practicalities and controls of the works required to provide an acceptable landform consistent with the restoration plans, however several of the provisions are relevant to planning the investigation and assessment:

- The paper pulp will be removed (this activity, including treatment and/or disposal of leachate will be undertaken under the provisions of a variation to the New Tip Permit);
- The existing leachate pump and sump will be decommissioned, and any excess height of chamber removed;
- The existing old tunnel will be inspected by an ecologist as necessary for the presence of bats following which a replacement drain will be constructed to the Drainage Engineer's current designed detail;
- The existing tip liner will be inspected by the Engineer and punctured or removed as necessary;
- The tip base together with any installed land drainage will be surveyed, and;
- The existing ash sub-base below the liner will be inspected.

The SGP Review and Mitigation Proposals contains a summary of the existing site end environmental setting describing the construction of the tip containment (ash base and banks graded to accommodate a single shallow lined cell with a central leachate chamber), the drainage and hydrogeological setting and the gas and leachate emissions. The report recommends that: "surrender of the existing New Tip permit would follow on from the verified removal of the paper sludge wastes and demonstration that there were no residual pollution risks arising from the landfill" but does not make specific provisions for how this is to be achieved.

Both of these reports were reviewed (Ref: NO/2012/104599/09, 08 January 2013) by the EA Contaminated Land and Groundwater team when consulted as part of the Planning Application for the New Tip restoration. The response to Planning contains the following comments in respect of assessment of the New Tip following removal of the wastes and before further restoration works under the existing Planning Consent:

- After removal of the paper pulp waste would recommend that further investigation and assessment is undertaken on the material beneath the base liner to ensure that the material is suitable for retention in this location;
- This material was artificially placed and should therefore be considered made ground not, not natural deposits. As such that it may pose on the environment should be considered, and;
- Given the exposed and uncovered nature of the New Tip, we believe that there is a high possibility that the basal liner has been ruptured. In this circumstance the underlying materials may have been impacted by landfill leachate and could be significantly contaminated.

Objectives and Rationale

We understand that to accept a surrender the EA must be satisfied that measures are in place to avoid pollution risks resulting from the operation and return the site to a satisfactory state having regard to the state of the site before operations commenced.

Part of the surrender submission will therefore comprise the available records for the activities carried out under the permit and monitoring records collated up until and during the period when the waste is to be removed. This will include details and records of the operation to remove the waste and associated leachate and detailed recording of the condition of the liner once exposed.

Under the specific circumstances under consideration, reference is made to Regulatory Guidance Note RGN9: Surrender. The guidance specifies that for Landfills where all the waste has subsequently been removed, *"the surrender application must demonstrate that no residual contamination which is likely to cause pollution is left in the ground"*.

The main body of evidence will therefore comprise a site investigation to review the condition of the site following removal of the wastes, through a combination of visual inspection and sampling of the formation left exposed following removal of the landfill liner, to ensure no transmission of solid materials to the underlying ground, and collection of representative soil samples from the underlying materials. The samples will be analysed for a combination of total and leachable contaminants associated with the wastes that have been removed, with results compared to those acquired for similar materials which did not underlie waste materials to allow meaningful assessment as to whether polluting residues remain and targets protective of the wider environment.

In terms of stabilisation following removal of controls, most of the provisions for monitoring to demonstrate stabilisation of the site are not relevant because the controls have never been required (control of groundwater levels, extraction of landfill gas, control of infiltration of water into landfill), or in the case of collection of leachate and surface water, the removal of the wastes by definition presupposes the generation of leachate.

As all the wastes are due to be removed, the aftercare phase of monitoring is anticipated to be restricted to a period of ground and surface water monitoring immediately following waste and liner removal to assess conditions remain consistent with the previous ranges for the various contaminants and pollutants under assessment and are stable, i.e. that no deterioration on conditions occurs. This monitoring will continue under the existing programme provisions until the surrender is accepted.

Specification for proposed works

In order provide information in accordance with the above rationale the following specific programme of works will be implemented following removal & treatment of wastes under the provisions of the Permit Variation being sought.

- 1) Detailed inspection and recording of condition of liner.
- 2) Recording removal of liner and other infrastructure (leachate collection point), topographical survey and detailed inspection and photographs of formation surface of underlying ground for waste residues;
- 3) Site Investigation entries (trial pits or boreholes) on a nominal 10m grid (equating to 20 entries), recording of detailed logs and photographs, descriptions and examination of materials for contamination indicators by suitably qualified and experienced personnel.



- 4) Collection of representative samples from each entry (nominally 2 sample per entry, one near the surface, the other at any interface with lower permeability materials).
- 5) Collection of sufficient numbers representative samples of similar materials from outside the new tip area to provide baseline data;
- 6) Analysis for total concentrations, and leachate testing of the samples (CEN 10:1) for the leachable pollutants of concern specified for the new-tip wastes, specifically: arsenic, cadmium, chromium VI, copper, nickel, lead, zinc, ammoniacal nitrogen, chloride, nitrate, sulphate, total organic carbon and pH.

The results will be assessed in a surrender report which will summarise the findings of the relevant reports and monitoring data.

I hope the above proposals are acceptable, however would welcome any comments you have and am available to discuss the matter if required.

Yours sincerely
For: Smith Grant LLP

B J Thomas
BSc MSc M.CIWEM C.Env SiLC

