

# CSIRO BELMONT UPDATE



SEPTEMBER 2019

## REMEDIATION UPDATE

In early July 2019, Enviropacific Services (EPS) commenced the establishment of their work site for the excavation and aeration of soil to remove dry-cleaning fluid (chlorinated hydrocarbons) from soil in a specific area on the eastern end of site (nearer to the Princes Highway).

The removal of dry-cleaning fluid through vapour extraction (aeration) requires an area of approximately 30m x 30m to be excavated to a depth of approximately 11m. Testing of soils around the area of the dry-cleaning fluid site indicate that the contamination is unlikely to extend beyond 30m x 30m area.

During the preliminary works to establish the site, EPS discovered unexpected cement bonded asbestos pieces in and around the work area. In accordance with the Environment Protection Authority (EPA) and Worksafe guidelines, asbestos contaminated soil must be removed from site.

To ensure that the work area is safe and clear of further asbestos contamination, CSIRO engaged additional services to undertake sampling from 49 test pits within in the surrounding area.

## TEST PITS

Test pit excavation was undertaken during mid to late July 2019. During this work, asbestos monitoring was undertaken at areas that represent the work zones including the perimeter boundaries of the site. Asbestos air monitoring results confirm <0.01 fibres/ml of air or less, which is well within the EPA/Worksafe requirements.

The results of the test pit sampling indicated a wider area of asbestos contamination in the soil. As a result of the test pit works, a staged process of separately stockpiling asbestos contaminated soil was undertaken. This was in preparation for the contaminated material to be removed from site by an appropriately licenced contractor and taken to a registered EPA waste facility.

The contaminated material is wrapped/covered to prevent disbursement due to wind. The trucks are also wrapped and covered to prevent disbursement during transport, in accordance with EPA requirements. The transportation off site has taken place over the last fortnight and will continue until the end of September. The loaded trucks leave site from the south east corner on to the Highway. Due to the size and weight of the trucks, Vic Roads will not allow the trucks to cross the Highway at Henry Street (to head South). Therefore, the trucks have been directed up Henry Street to Reynolds Road to turn right on the Highway at the Reynolds Road/High Street intersection. The Council have approved the truck use of Henry Street.

The heavy truck movement is expected to be completed by 27 September 2019 at the latest.

## HAUL ROADS

Haul roads are temporary thoroughfares providing safe access to the contractor's work site areas. They allow for the movement of construction materials and heavy machinery around the site in a safe manner, with a limited gradient and to prevent damage to other areas of site.

Haul Roads were necessary for the stockpiling of soil for vapour extraction of dry-cleaning fluid. To ensure separation of soils preventing cross contamination of asbestos materials, additional haul roads were required. These roads have been created at least 10m away from the boundary on the south side except for the eastern corner, adjacent to the tent. The usage of this section of haul road is limited to the removal of asbestos contaminated soil in covered trucks until the end of September 2019.

With the heavy rains during July and August, the site was particularly muddy. The haul road construction required a stable layer of large rock with a topping of smaller rock. One hundred and fifty-five truckloads of large rocks were delivered and distributed on site with fifty five loads of smaller rock topping. The noise during the delivery of the rock base was unavoidable. Whilst the unloading of rock was loud, vibration was minimal. The structure of the haul roads will reduce ongoing noise and vibration from trucks during the movement of soils around the site.

## VAPOUR EXTRACTION WORKS

The large "tent" has been erected on the south eastern section of site. This tent will be used to process soils to assist in releasing the dry-cleaning fluid from the soil prior to being stockpiled. The tent will have extraction systems to absorb odours as the soil is broken in to small clumps within the tent prior to being stockpiled for vapour extraction. The extraction systems will have special carbon filters to absorb the hydrocarbons released during processing.

Excavation of the pit and movement of soil to the tent is programmed to commence on Monday 23 September 2019. The processing of soil through the tent is expected to take 4-5 weeks. Once processed, the soil will be stockpiled.

## STOCKPILING PROCESS

The stockpiling and extraction processes will be like the Pilot Trial conducted last year. This work will commence during week commencing 23 September 2019. The hydrocarbon contaminated soil will be stockpiled in windrows, commencing approximately 10m away from the south boundary. Stockpiles will run in an east west direction and be approximately 2m high and around 150m or so long.

The stockpile construction process will take approximately 5 weeks. During the vapour extraction from the stockpiles, carbon filtration will be used to absorb vapours in a process similar to that used in the tent. The vapour extraction will then take place over approximately 16 weeks. During the processing, stockpiling and extraction periods, the environment will be monitored for hydrocarbons. The extraction system will be surrounded by noise reduction materials, such as hay bales, to minimise disruption to neighbours. Stockpiled materials around the site will be covered to control any water ingress, loss of soil and dust being windblown/dispersed.

## WORKING HOURS

All site works will be undertaken during Monday to Friday working hours of 7am to 5pm. The works will be overseen by environmental consultants, Jacobs. Weekend work is not anticipated.

## PROGRAM

From the end of September 2019, work on site will mainly be soil processing and stockpiling. This work will require truck movement of soil within the site. The removal of large excavating equipment and small delivery trucks will be infrequent until the completion of the works.

When the chlorinated hydrocarbon level in the remediated soils has been reduced to a satisfactory level, the material will be replaced into the excavation hole and compacted. At this time EPS will decommission/leave the site. As a result of delays due to weather and asbestos contaminated soil removal, the anticipated completion of the works has been revised to April 2020.

## KEEPING YOU SAFE

CSIRO is committed to keeping its staff, contractors and the local community safe during the site remediation projects. To this end, CSIRO has engaged an independent licenced asbestos assessor to monitor the removal of hazardous materials. As areas are cleared and material is removed, an industrial hygienist ensures that work is carried out in line with the Worksafe requirements and Australian Standards for the removal of hazardous materials. Each area is issued with asbestos clearance certificates to ensure waste is safely collected and disposed of. All certificates are reviewed by an independent environmental auditor and Worksafe to ensure work is being completed to a satisfactory standard in line with legislation. In addition, air and dust monitoring is conducted daily in representative areas to ensure that levels are in line with Victorian legislation.

The asbestos material found has been non friable asbestos cement pieces likely to have been from cladding of old buildings, roofs and the like.

Worksafe and an independent environmental auditor review all clearance certificates issued for hazardous material to ensure work is being conducted in accordance with Victorian legislation. Throughout the asbestos soil removal, all air and dust monitoring results have been within acceptable levels.

## OTHER INFORMATION

CSIRO will continue to maintain the grounds and verge by ensuring the grass is regularly cut and boundary trees are kept in good order. The fence around the property preventing unauthorised access to site will remain until the completion of the works. Graffiti will be removed/painted over on a monthly schedule.

## KEEPING YOU INFORMED

CSIRO will provide further community updates during the work. These updates will be issued every couple of months and will be updated on our community website <https://wp.csiro.au/belmontworks/>

If you have any questions or concerns, please contact us on 1300 363 400 (9am-5pm Monday - Friday), or email us at: [Belmontworks@csiro.au](mailto:Belmontworks@csiro.au)



**For more information about the project please contact the project team between 9am and 5pm on 1300 363 400, email [Belmontworks@csiro.au](mailto:Belmontworks@csiro.au) or visit the website <https://wp.csiro.au/belmontworks/>**