Using ash from burnt trash to reclaim land

NEA studying the possibility as part of efforts to conserve landfill space

By JASON TAN

While the NEA has embarked on a project to extract valuable ash from burnt rubbish to be used as a building material, it is part of efforts to conserve landfill space and prevent the further expansion of the Fly Ash Stockpile at Tuas South, which is situated about 2.6km south of the main landfill site.

The Fly Ash Stockpile is a large-scale facility that has been set up to manage the disposal of ash generated from the incineration of waste materials, particularly municipal solid waste. The ash is generated as a result of the incineration process and contains valuable materials such as silica and alumina, which can be used for various applications such as construction materials.

The Fly Ash Stockpile site includes a series of large piles of ash that are stacked in a specific manner to ensure proper drainage and to minimize the risk of leaching of hazardous substances into the environment. The ash is stored within a series of containment structures, including a series of earthen berms and barriers, to prevent any potential contamination of nearby water bodies or soil.

The NEA has been investigating the possibility of using the ash generated from the incineration process for various applications, including as a building material. The agency is currently exploring the feasibility of using the ash to construct new buildings, roads, and other infrastructure projects, which could help to conserve landfill space and reduce the need for additional landfill sites.

The agency is also investigating the use of the ash for other applications, such as the production of construction materials like concrete and asphalt, which could further reduce the demand for traditional construction materials and help to conserve natural resources.

The NEA is currently working with technology partners to develop innovative solutions for the use of ash and is actively seeking partnerships with the private sector to explore commercial opportunities for the use of ash in various applications. The agency is also conducting research and development to improve the efficiency and effectiveness of its waste management processes, which could help to reduce the generation of ash and other waste materials.