

SHE HYGIENE ASBESTOS HEAT MAP GEOSPATIAL SOLUTION FOR SASOL SECUNDA SITE.



Thabang Monate



Delivering with Purpose
FUTURE SASOL



- Background on ACMs.
- ACM - A Forgotten ESG Problem.
- ACM Solution Request Statement.
- Solution Methods and Materials.
- Results and Impacts.
- Conclusion and Opportunities.

Background on ACMs

- Asbestos Containing Materials are a critical environmental, sustainability, and governance issue in various countries, including South Africa.
- The use, manufacturing, import and export of asbestos containing material is banned in about 50 countries, including South Africa (as of March 2008).
- However, there remain a number of Asbestos Containing Materials left in the country, residential areas and industries, and will be with us for many years if not deliberately managed and removed.
 - This is important to reduce the health impact caused by exposure to ACM.
 - To reduce the potential of asbestos fibres to pollute the environment and fresh waterways.

Regulation on ACMs

- The Asbestos Abatement Regulations of 2020 imposes a duty on employees to provide and maintain, as far as possible, a working environment that is safe and without the risks to the health of employees.
- In Sasol, every entity is compelled to comply with the legal requirements applicable to the country where they operate.
 - In South Africa – Asbestos Regulations R155 of 2002 framed under the occupational Health and Safety Act, 1993 (Act No.85 of 1993)

ACM - A Forgotten ESG Problem

ACM as an ESG Problem

- “Investors have been living with the false impression that asbestos is a legacy issue from the 1960’s that has been dealt with.” – Noble Gordon.
- “Asbestos is a classic universal case study, where the impact of asbestos related diseases will impact the whole of society through increased health costs and reduced economic productivity”. – Noble Gordon.
- As part of the Sasol Group Policy for Asbestos Phase-out:
 - The use of Asbestos Containing Materials will not be allowed for new projects, and no material containing asbestos will be procured or installed in new or existing facilities.

ACM Solution Request Statement

Request user story

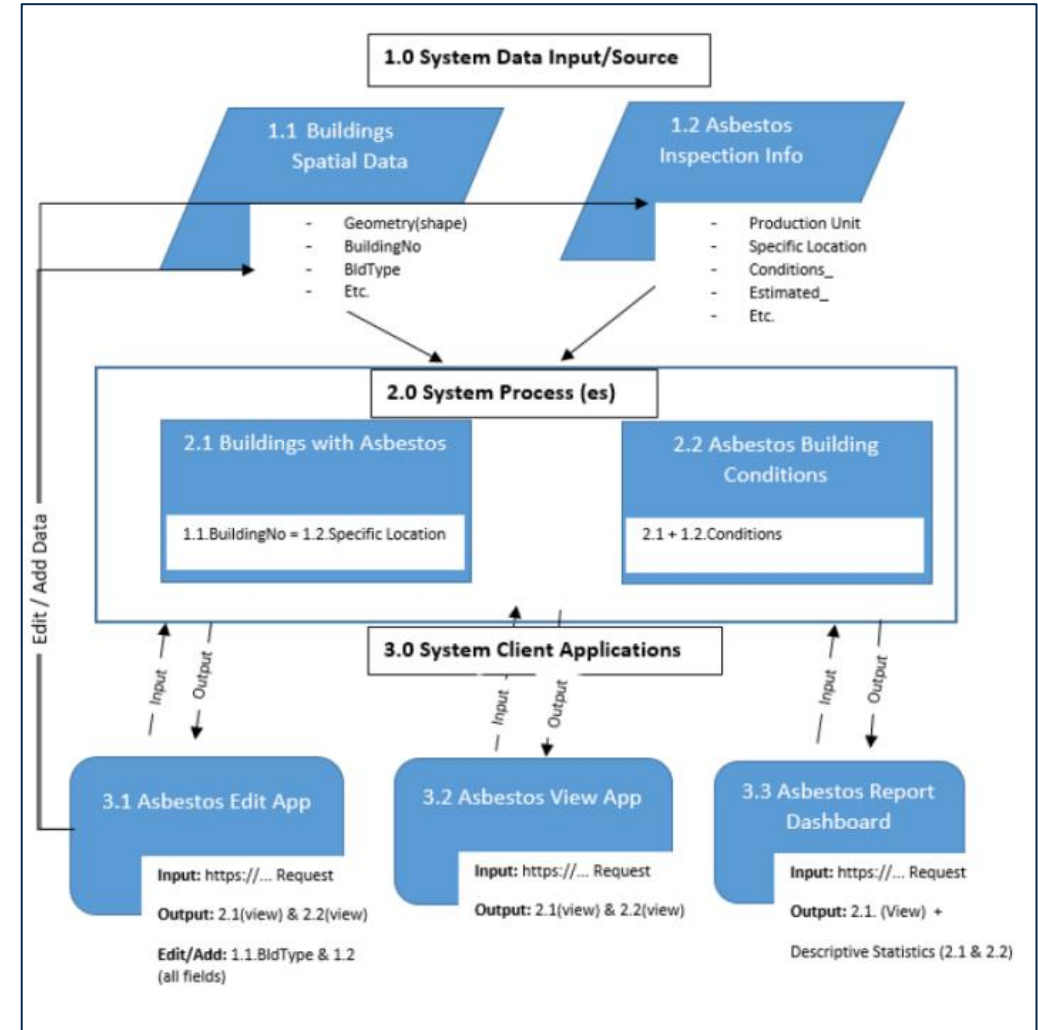
- The SHE Hygiene team requested an ACM Geospatial Solution to:
 - Enhance awareness and future management decisions with respect to the existing and demolished asbestos buildings at the Sasol Secunda Site,
 - With the added benefit of ensuring legal compliance to the Asbestos Regulations.
- Other stakeholders that would benefit from the solution are the 16(2) appointees, in terms of the Occupational Health and Safety Act (Act no 95 of 1993) with regards to legally required rehabilitation provisions.

Acceptance criteria

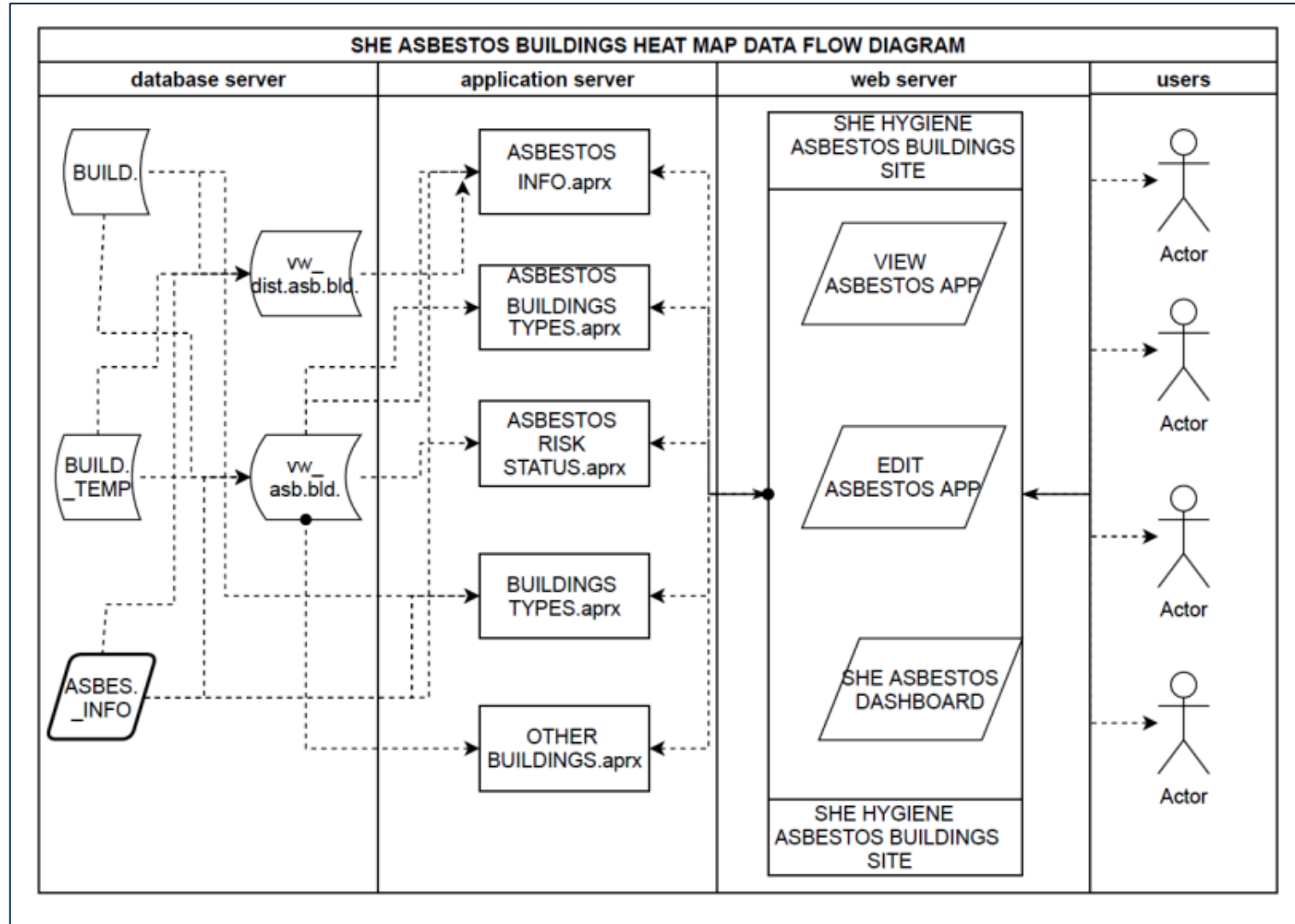
- Display asbestos buildings in the ArcGIS system with relevant reporting capability that will add value to the viewer of the information.

Geospatial Solution Methods and Materials

- Enterprise Geodatabase Configuration.
 - Spatial shape buildings data.
 - The asbestos inspection excel data.
- ArcGIS Pro Map Design.
 - Asbestos Containing Materials Buildings.
 - ACM Conditions Assessment Status.
- Web Maps and Apps Configuration.
 - Asbestos Edit App
 - Asbestos View App
 - Asbestos Report Dashboard



Geospatial Solution Methods and Materials





Secunda Synfuels ArcGIS Portal Site

Monate, Thabang

SHE HYGIENE ASBESTOS BUILDINGS HEAT MAPS

Visualization, Editing, Reporting

This SHE Hygiene Asbestos Buildings GIS platform aims to enhance awareness and future management decisions with respect to the Secunda Site, with the added benefit of ensuring legal compliance to the Asbestos Abatement Regulations, GNR. 1196 of 10 November 2020.

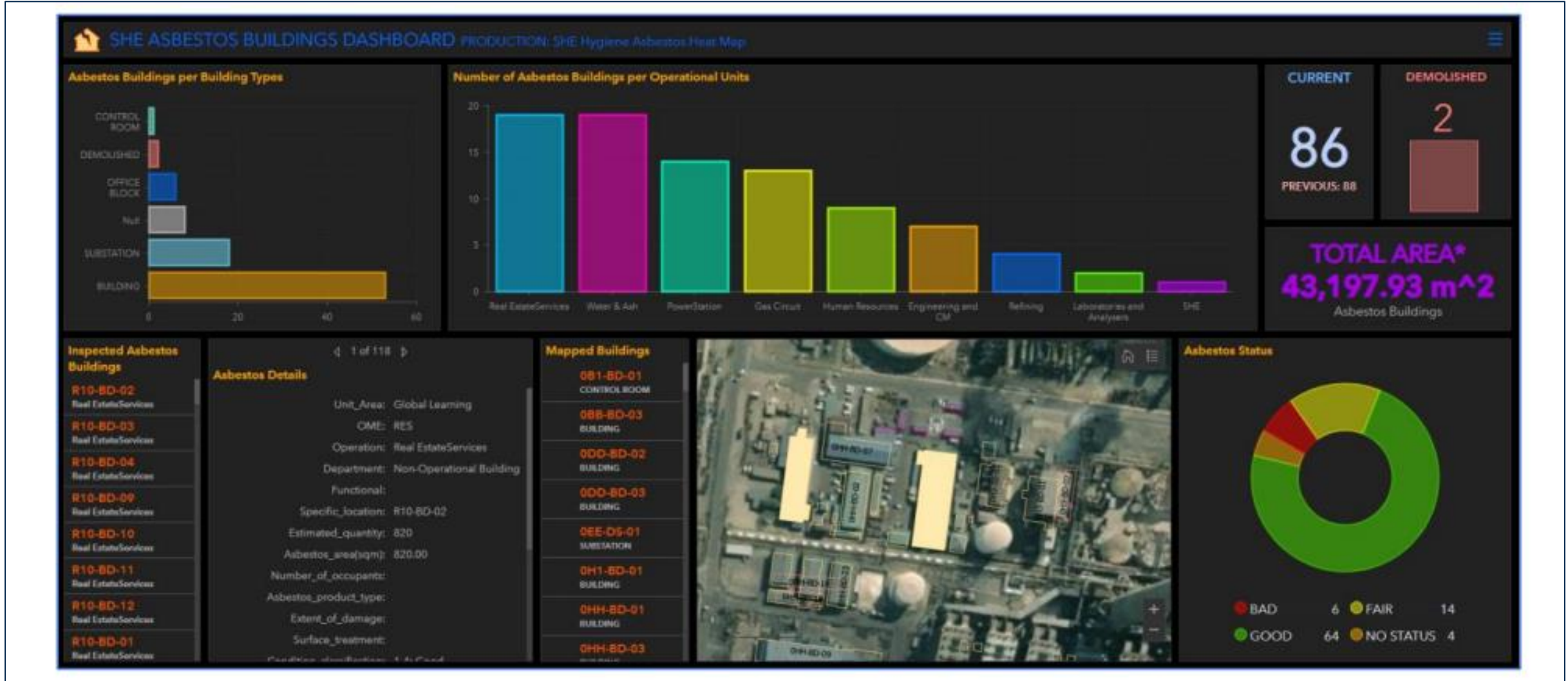
APPLICATIONS

- View Asbestos Buildings App**
Heat map displaying different layers of current or demolished asbestos buildings.
- Updates Asbestos Buildings Info App**
Edit and Export asbestos report information. Special Access Permissions Required.
- Asbestos Buildings Dashboard App**
Monitoring of data. Special Access Permission Required.

Results and Impacts

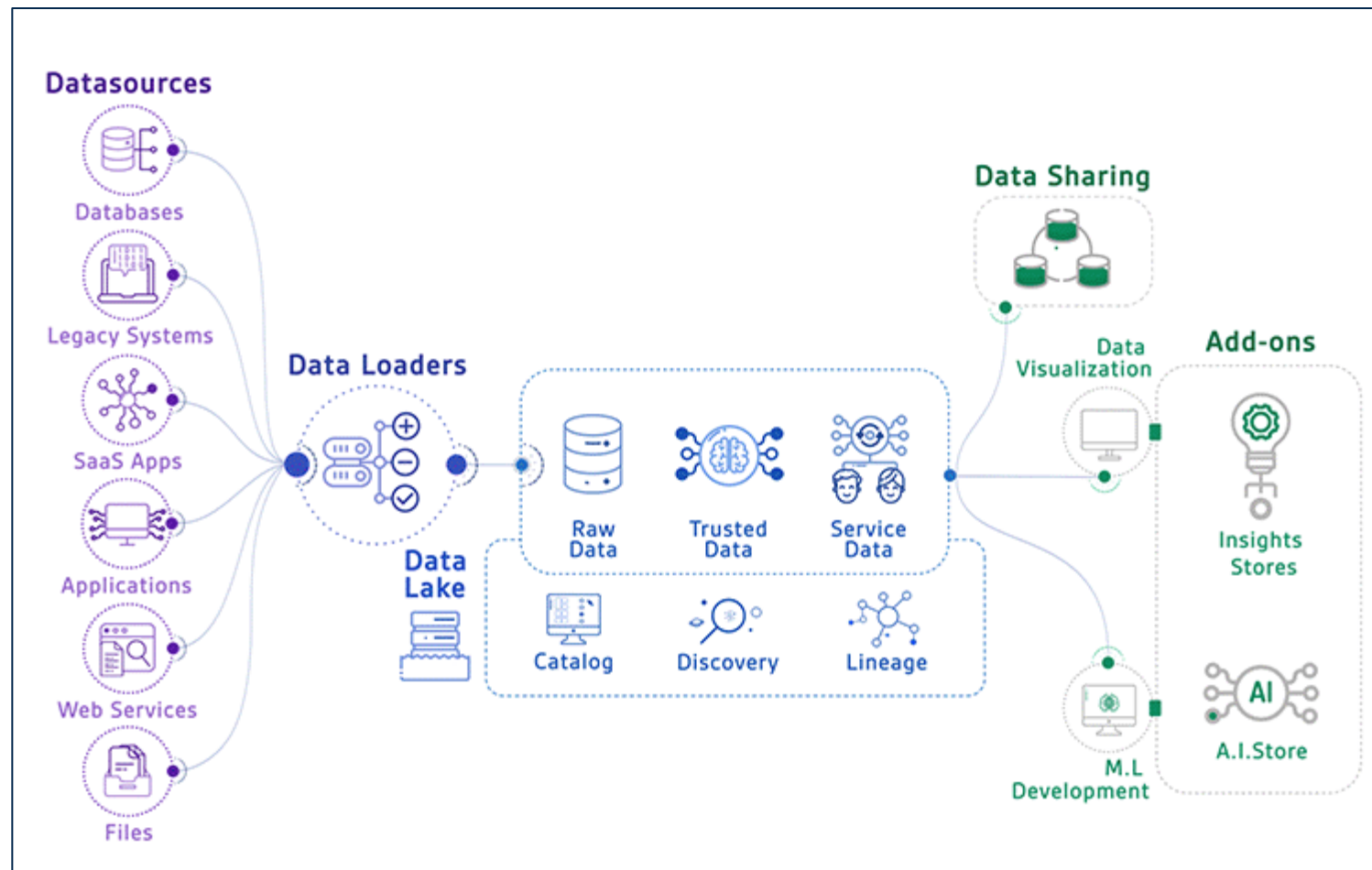


Results and Impacts



Conclusion and Opportunities

- Success in:
 - Displaying asbestos building inspection information,
 - Editing the inspection information, and
 - Reporting on these asbestos building inspection information.
- Enhance:
 - Awareness and future management decisions with respect to the existing and demolished asbestos buildings at the Sasol Secunda Site.
 - Added benefit of ensuring legal compliance to the Asbestos Regulations.
- Opportunity:
 - Optimisation of business processes.





SASOL