

FINE CHEMICALS CORPORATION (PTY) LTD

SITE SENSITIVITY VERIFICATION REPORT

EXPANSION OF THE FCC FLAMMABLE
DRUM STORE FACILITY ON ERF 32560 AND
ERF 102119, EPPING INDUSTRIA 1, CAPE
TOWN

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102119 & 32560, EPPING
INDUSTRIA 1 FINE
CHEMICALS
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1 INTRODUCTION

Fine Chemicals Corporation (Pty) Ltd (FCC), the Proponent, is a manufacturer of pharmaceutical products. The company produces a variety of products such as codeine phosphate, morphine sulphate, and paracetamol. FCC upgraded their flammable drum storage facility to improve their fire safety elements of the facility. These measures included the following changes:

- Expanded the foam tank enclosure by 5m² (external to the Flammable Storage Area);
- Constructed a new bunded drum offloading and loading area external to the Flammable Substance Storage area (41.5m²);
- Installation of a sprinkler system;
- Increased the height of bund wall from 150mm to 450mm, this increased the total storage capacity of the bund to contain sufficient volumes of fire water and dangerous chemicals in the event of a fire;
- Increased the height of the interior walls to roof height to improve fire containment; and
- Installation of roller doors per section to improve fire containment.

As a result of the changes implemented at the flammable store, the potential exists to increase the volume of dangerous goods stored within this facility. Currently the facility is storing 192,000 Litres; however, the capacity of the facility with the increased bund wall and interior walls could increase to 435,600 Litres. Therefore, Activity 34 and Activity 51 of Listing Notice 1 of the EIA Regulations (2014, as amended) are triggered as a result of the proposal to increase the storage volume of dangerous goods at the existing FCC flammable store.

This Site Sensitivity Verification Report forms part of the Notice of Intent (NoI) for the proposed Basic Assessment (BA) process to be undertaken for the expansion of the Flammable Drum Store in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA).

2 PURPOSE OF THE REPORT

WSP Group Africa (Pty) Ltd (WSP) has been appointed by FCC as the independent Environmental Assessment Practitioner (EAP) to undertake the required EIA application process in terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) promulgated under NEMA for the proposed expansion of the flammable drum storage facility and resultant increased storage capacity for dangerous goods on Erf 32560 and Erf 102119, Epping Industria, Cape Town.

The Department of Forestry, Fisheries and the Environment (DFFE) has developed the National Web-based Environmental Screening Tool in order to flag areas of potential environmental sensitivity related to a site as well as a development footprint and produces the screening report required in terms of regulation 16 (1)(v) of the EIA Regulations (2014, as amended). The *Notice of the requirement to submit a report generated by the national web-based environmental screening tool in terms of section 24(5)(h) of the NEMA, 1998 (Act No 107 of 1998) and regulation 16(1)(b)(v) of the EIA regulations, 2014, as amended (GN 960 of July 2019)* states that the submission of a report generated from the national web-based environmental screening tool, as contemplated in Regulation 16(1)(b)(v) of the EIA Regulations, 2014, published under Government Notice No. R982 in Government Gazette No. 38282 of 4 December 2014, as amended, is compulsory when submitting an application for an Environmental Impact Assessment in terms of regulation 19 and regulation 21 of the EIA Regulations, 2014 as amended as of 04 October 2019.

The Screening Report generated by the National Web-based Environmental Screening Tool summarises development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmentally sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected.

A screening report for the proposed expansion of the FCC flammable drum storage facility was generated on 31 May 2022 and is attached as **Appendix D** of the Notice of Intent (NOI). The Screening Report for the project identified several sensitivities for the site. The report also generated a list of specialist assessments that should form part of the BA process based on the development type and the environmental sensitivity of the site. Assessment Protocols in the report provide minimum information to be included in a specialist report to facilitate decision-making.

The Screening Report acknowledges that *“it is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation.”* The report seeks to address the findings of the Screening report and motivate the proposed specialist studies identified to be conducted.

This document also seeks to answer whether the specialist studies are required to comply with the *Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Section 24(5) (a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for an Environmental Impact Assessment (“the Protocols”)* (Government Notice No. 320 as published in Government Gazette No. 43110 on 20 March 2020 (GNR 320)).

3 METHODOLOGY

In line with GNR 320, the site sensitivity was undertaken by the EAP through the use of:

- A desktop analysis, using satellite imagery;
- A preliminary on-site inspection undertaken on 22 November 2021 (see **Appendix A** for photographs); and
- Any other available and relevant information.

4 FINDINGS

4.1 PROJECT AND SITE OVERVIEW

Erf 32560 and Erf 102119 (the Site) are located within Epping Industria 1 and zoned General Industrial 2. The Site, which measures 37 350.6 m² in extent, comprises a series of established warehouse facilities / structures with a total footprint of 28 542 m². This is confirmed in Error! Reference source not found., and in photos undertaken during a site verification assessment (see **Appendix A**). FCC currently uses the storage facility to store 192 000 L of dangerous goods. The operational footprint is 977m².



Figure 1: Satellite imagery of Erf 32560 and Erf 102119 (Source: Cape Farm Mapper, 2022)¹

4.2 ENVIRONMENTAL SENSITIVITY

As per the Screening Tool Report (Appendix D of the NoI), the proposed site is indicated to be located within areas ranging from low to very high sensitivity. These are identified in **Table 1**.

¹ It is noted that there is a discrepancy regarding the boundary of Erf 102119 between the City of Cape Town zoning viewer and the DFFE Screening Tool Report generated for the site. Figure 1 displays the erf boundary indicated in the City of Cape Town zoning viewer.

Table 1: Proposed Development Area Environmental Sensitivity

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme	X			
Defence Theme	X			
Palaeontology Theme				X
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

Based on information gathered through a desktop study and site assessment, not all of the identified sensitivities apply to the site in its current state. The tables that follow serve to:

- Verify land use and sensitivities identified in the Screening Tool Report (as indicated above);
- Provide motivation and evidence of either the verified or different use of the land and environmental sensitivity; and
- Confirm / refute the need for the various specialist inputs recommended in terms of the Screening Tool Report.

Table 2: Themes identified by Screening tool report and verification thereof

#	THEME	SENSITIVITY	RELEVANT (YES/NO)	EAP'S COMMENT
1	Agricultural	Medium	No	The land capability has been identified as Low-Moderate to Moderate. The site is fully transformed and is located in an industrial zoned area, with surrounding industrial land uses with no potential for agriculture. Medium sensitivity is therefore refuted .
2	Animal Species	Medium	No	The site and surrounding erf's are zoned as industrial areas. The expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building footprint, is proposed. Furthermore, no terrestrial animal habitat exists on site. As such, the presence of <i>Bullacris obliqua</i> or <i>Conocephalus peringueyi</i> on site (as identified by the Screening Tool Report) is therefore unlikely. The medium sensitivity identified for the site is therefore refuted .

#	THEME	SENSITIVITY	RELEVANT (YES/NO)	EAP'S COMMENT
3	Aquatic Biodiversity	Very High	No	<p>The site is situated 538m and 355m from Depression wetlands. A perennial river is 713m away and the Elsieskraal river is situated 1097.9m from the site (Appendix B).</p> <p>The site and surrounding land are within an industrial zoned area and are fully developed. There is no indigenous vegetation, watercourses, or wetlands on site, and groundwater is not sourced from the site. The expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building footprint, is proposed.</p> <p>Very high sensitivity in terms of aquatic biodiversity identified for the site and is therefore refuted.</p>
4	Archaeological and Cultural Heritage	Very High	No	<p>The site is located approximately 5km east of the South African Astronomical Observatory within observatory (Grade 1 heritage site). The site is fully developed, and the proposed expansion activities entail no construction, only the increase in storage and will all be located within an existing warehouse structure with no change in building footprint. The increased storage capacity within the flammable drum storage facility will not have any effect on the heritage feature.</p> <p>Very high sensitivity in the site-specific context is therefore refuted.</p>
5	Civil Aviation	Very High	No	<p>The site is within 15 km of a civil aviation radar and between 8 and 15 km of a major civil aviation aerodrome. The Cape Town International Airport is approximately 8 km South East of the site. The Ysterplaat Airbase is situated roughly 4.21 km north west of the site.</p> <p>The upgrade to the flammable drum storage facility does not have elements that would affect civil aviation. The proposed expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building height, is proposed.</p> <p>High sensitivity in the site-specific context is therefore refuted.</p>
6	Defence Theme	Very High	No	<p>The Ysterplaat Airbase is 4.3km North west of the site. The expansion work will not affect the military and defence site. The site and surrounding land use are within an industrial zoned area. The expansion work is located within an existing flammable drum storage facility and no external construction or increase of building footprint is proposed. Very high sensitivity in terms of defence is therefore refuted.</p>
7	Palaeontology	Low	No	<p>As per the SAHRIS PaleoSensitivity Map, the site is within an area where <i>'no palaeontological studies are required however a protocol for finds is required'</i>.</p> <p>The site has been previously completely transformed. The site and surrounding land use are within an industrial zoned area. The increase in storage volumes will all be located within an existing warehouse structure and no construction is proposed.</p> <p>No impacts to paleontological resources are expected. Low sensitivity is therefore refuted within the project and site-specific context.</p>

#	THEME	SENSITIVITY	RELEVANT (YES/NO)	EAP'S COMMENT
8	Plant Species	Low	No	The site has been completely transformed. The site and surrounding land use are within an industrial zoned area. The expansion storage capacities will be located within an existing flammable drum storage facility and no external construction or increase of building footprint is proposed. No impacts to any plant species are therefore expected. Low sensitivity is therefore refuted within the project and site-specific context, the site is deemed to have no sensitivity with respect to plant species.
9	Terrestrial Biodiversity	Very High	No	The site is situated within the Critically Endangered Cape Flats Sand Fynbos Ecosystem according to the Screening Report. However, the site is located in an established industrial zoned area, with surrounding industrial land uses, and has been completely transformed. The expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building footprint, is proposed. Very High sensitivity is therefore refuted within the project and site-specific context

4.3 SPECIALIST ASSESSMENTS

Based on the identified sensitivities, the Screening Tool Report recommended 12 specialist assessments to be undertaken as part of the assessment process. **Table 3** identifies the specialist studies as indicated in the Screening Tool Report and whether they are proposed to be undertaken as part of the BA process or not. A motivation by the EAP is also provided.

Table 3: Identification of specialist studies as per the Screening Tool Report to be undertaken as part of the Basic Assessment process and motivation for including or excluding the study

#	SPECIALIST ASSESSMENT	TO BE UNDERTAKEN (YES/NO)	MOTIVATION
1	Agricultural Impact Assessment	No	The site, which is fully developed, is located in an industrial zoned area with surrounding industrial land uses. The expansion is located within an existing flammable drum storage facility and no external construction, or increase in building footprint, is proposed. An Agricultural Impact Assessment is therefore not deemed necessary.
2	Archaeological & Cultural Heritage Impact Assessment	No	The proposed development does not constitute the undertaking of any of the categories of development set out in Section 38(1) of the National Heritage Resources Act (Act 25 of 1999). The expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building footprint, is proposed. No impacts to archaeological or cultural heritage are expected. As such, an Archaeological and Cultural Heritage Impact Assessment is not deemed necessary.
3	Palaeontology Impact Assessment	No	The Screening Tool Report identifies the site as having "low" palaeontological sensitivity. As per the SAHRIS PaleoSensitivity Map 'no palaeontological studies are required however a protocol for finds is required'. However, the expansion activities will all be located within an existing warehouse structure and no external construction, or increase in building footprint, is proposed. No impacts to palaeontological resources are therefore expected. As such, a Palaeontology Impact Assessment and protocol for finds is not deemed necessary.

#	SPECIALIST ASSESSMENT	TO BE UNDERTAKEN (YES/NO)	MOTIVATION
4	Terrestrial Biodiversity Impact Assessment	No	The site has been completely transformed. The site and surrounding land use are within an industrial zoned area. The expansion work is located within an existing flammable drum storage facility and no external construction or increase of building footprint is proposed. The site does not support any indigenous vegetation, watercourses, or wetlands and, as such, no terrestrial or aquatic biodiversity is expected to be impacted as part of the proposed expansion. Terrestrial and Aquatic Biodiversity Impact Assessments are therefore not deemed necessary.
5	Aquatic Biodiversity Impact Assessment	No	
6	Hydrology Assessment	No	The site is situated 538m and 355m from Depression wetlands. A perennial river is 713m away and the Elsiekraal river is situated 1097.9m from the site (Appendix B). The expansion activities are within an existing flammable drum storage facility and no external construction or increase of building footprint. No impacts upon these futures are to be expected. A Hydrology Impact Assessment is not considered necessary.
7	Noise Impact Assessment	No	The expansion activities are within an existing flammable drum storage facility and no external construction or increase of the building footprint is proposed. Significant noise impacts are therefore not expected as a result of the expansion. A Noise Impact Assessment is therefore not deemed necessary.
8	Traffic Impact Assessment	No	The flammable drum storage facility is directly accessible from Hawkins Avenue via the existing road network. Considering the industrial nature of the area, and as no significant negative traffic impacts are expected as a result of the expansion, a Traffic Impact is not deemed necessary.
9	Geotechnical Assessment	No	The site has been completely transformed. The site and surrounding land use are within an industrial zoned area. The expansion work is located within an existing flammable drum storage facility and no external construction or increase of building footprint is proposed. A Geotechnical Assessment is therefore not deemed necessary.
10	Socio-economic Impact Assessment	No	The positive and negative socio-economic impacts of the upgrades to the flammable drum storage facility will be assessed by WSP in the Basic Assessment Report. It is not deemed necessary that a separate Socio-Economic Assessment be undertaken for the project.
11	Plant Species Assessment	No	The site has been completely transformed and developed and does not support any indigenous vegetation. The site and surrounding land use are within an industrial zoned area. The expansion work was located within an existing flammable drum storage facility and no external construction or increase of building footprint. Due to the current land use of the site and surrounding area, no endangered plant or animal species are likely to be found on the site or impacted as part of the proposed expansion. Plant and Animal Assessments are therefore not deemed necessary.
12	Animal Species Assessment	No	

5 CONCLUSION

Based on the outcomes of this Site Sensitivity Verification Report, no specialist assessments are considered necessary as part of the BA process for the proposed increase in storage of dangerous goods within the flammable drum storage facility since no construction or development is required to facilitate the increase in storage capacity of the existing warehouse facility.

APPENDIX

A SITE VISIT PHOTOS





Figure A : Internal view of the Flammable Drum store which has been upgraded.



Figure B : Internal view of the roller door from the corridor within the Flammable Drum Store.



Figure C : Internal view of the dangerous goods within the storage facility



Figure D : Internal view of the corridor and bunding surrounding the flammable storage facility.

APPENDIX

B SURROUNDING SURFACE WATER FEATURES

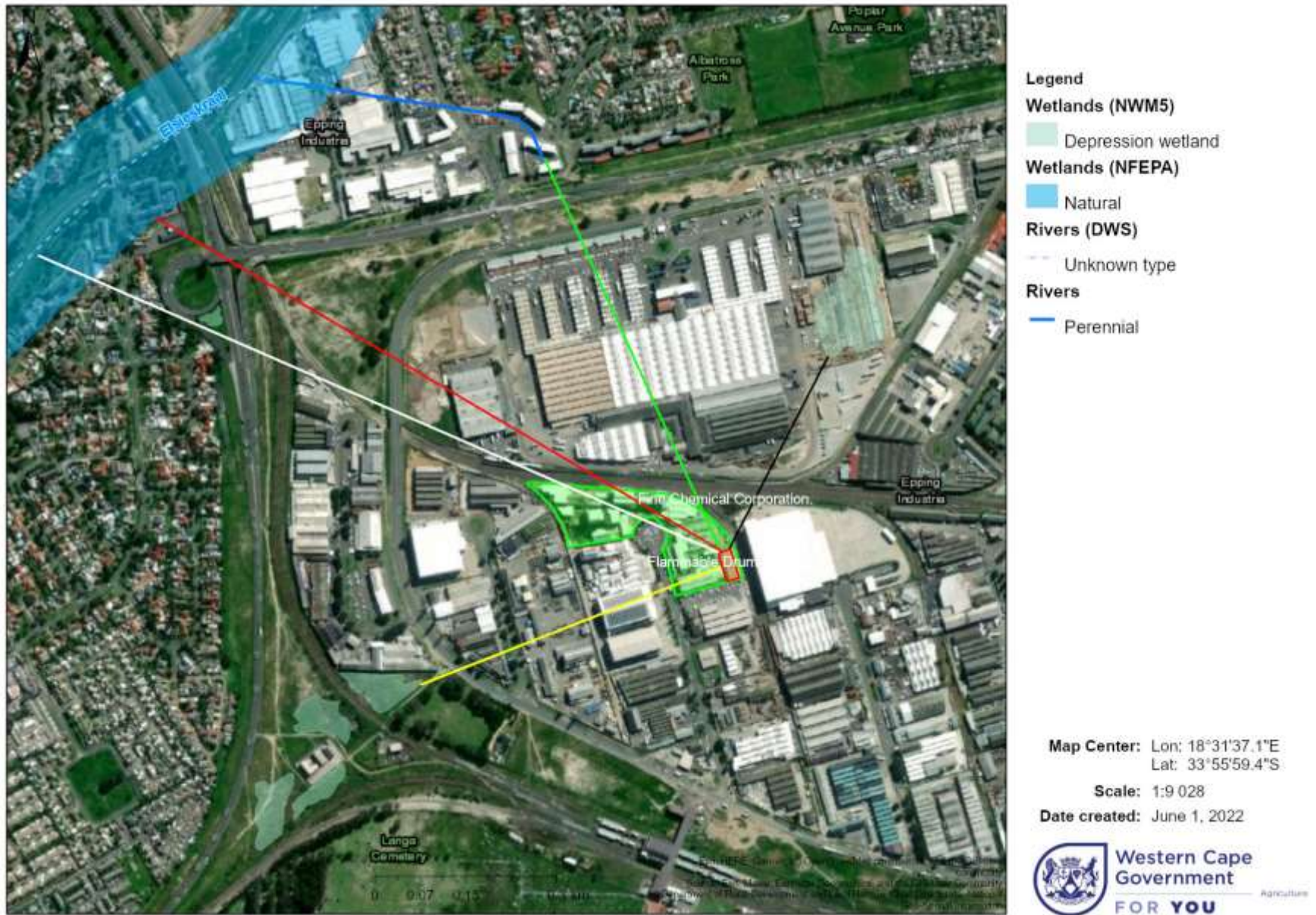


Figure A: Layout showing existing FFC facility in relation to surrounding surface water features