

PEDDIE MOTORS DEVELOPMENT ON ERF 13070, PEDDIE, EASTERN CAPE

DEPARTMENT OF WATER AND SANITATION (DWS) PROCESS

DWS REF: WU24106

Background Information Document

INTRODUCTION

Indwe Environmental Consulting was appointed by Imperium Developments on behalf of **Purple Rain Properties No. 63 Pty Ltd** to assist in certain technical and publication participation activities associated with their Water Use Licence Application process to the Department of Water and Sanitation (DWS) in terms of the National Water Act (Act 36 of 1998), on ERF 13070, in Peddie in the Eastern Cape (DWS REF: WU24106).

The activities to be undertaken include:

- Section 21(a)- “taking water from a water resource
- Section 21(c)- “impeding or diverting the flow of water in a watercourse”
- Section 21(i)- “altering the bed, banks, course or characteristics of a watercourse”

***Descriptions to the activities are provided further on in the document.*

This document is intended to provide background information to stakeholders, authorities and other interested and affected parties and forms a key component of the public participation process being undertaken as part of the Water Use License process.

PROJECT LOCATION

The site is located in within the town of Peddie on Erf 13070, positioned at co-ordinates 33°11'44.21"S; 27° 7'9.91"E. Of note it's the adjacent N2 highway that runs adjacent the development to the east and the unnamed non-perennial watercourse labelled a riparian drainage line and un-channelled valley bottom wetland located about 40 to 50m from the development on its western extent. The site prior to upgrade/ extensions was bordered by a mix of trees and herbacious vegetation. These trees from surrounding vegetation on site and similar visual structure from imaging were most likely alien vegetative species of fir/wattle.

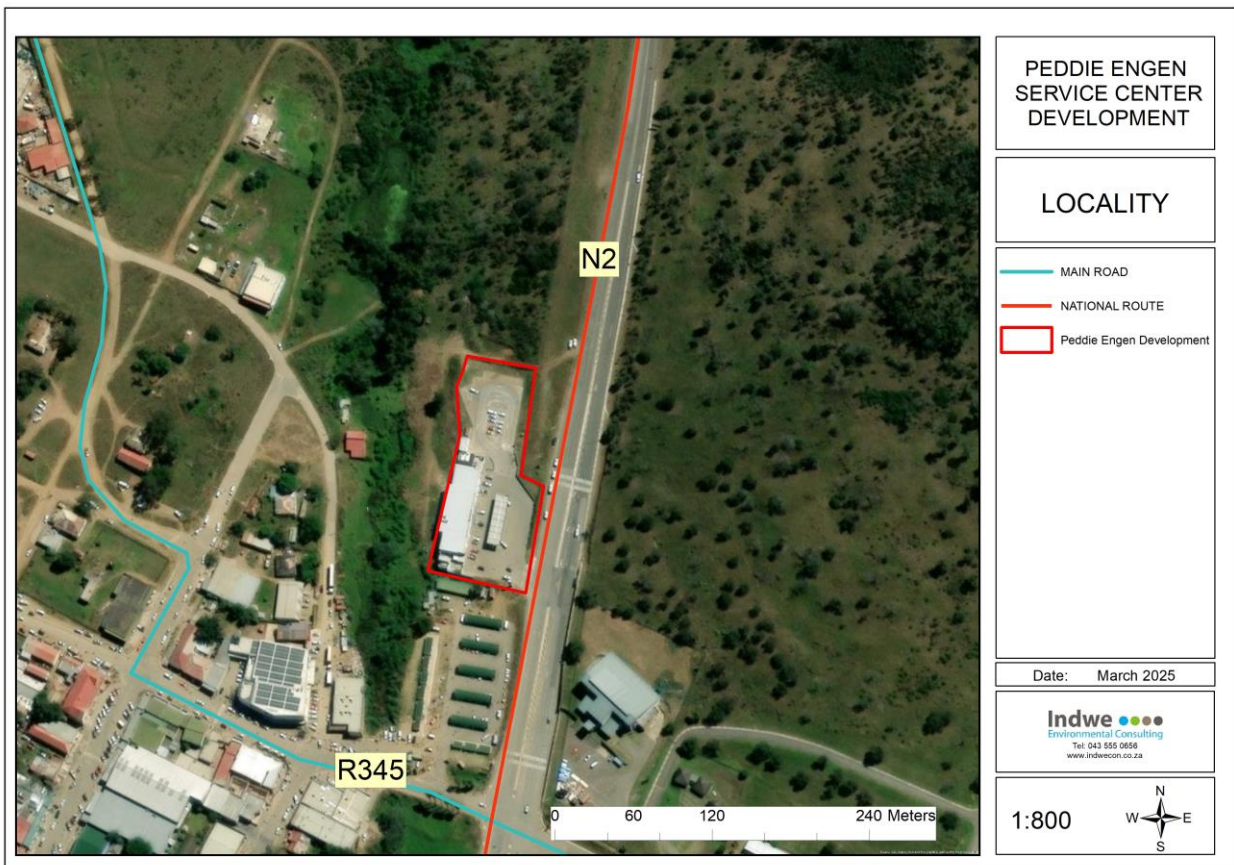


Figure 1: Aerial locality of Peddie Motors on Erf 13070.

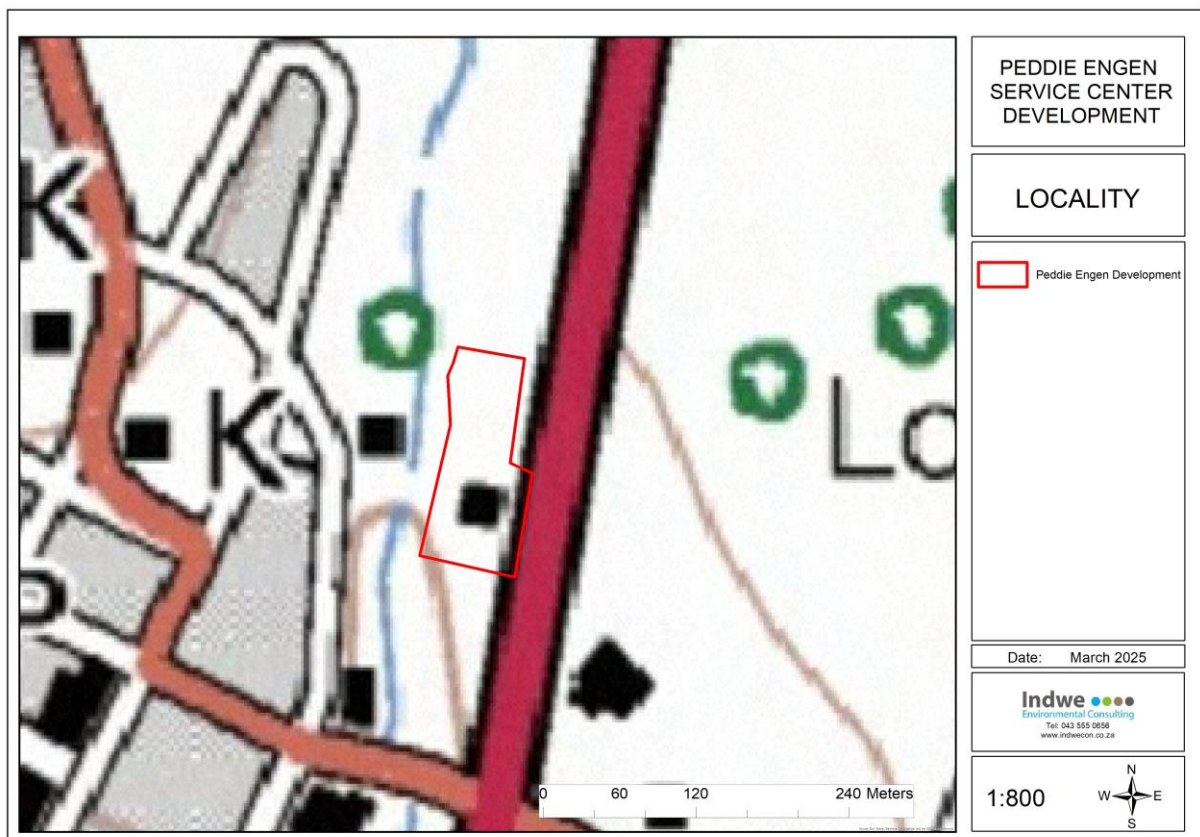


Figure 2: Topographical image of the site located on Erf 13070.

PROJECT DESCRIPTION

The Department of Water and Sanitation have issued a Notice of Intention to issue a Directive in terms of Section 53 of the National Water Act to the abovementioned Water User dated 17 February 2023. This was due to the Water User engaging in water use activities without applying for water use authorisation within a specific time frame. The water uses in question are as follows:

- Section 21(a)- “taking water from a water resource”
- Section 21(c)- “impeding or diverting the flow of water in a watercourse”
- Section 21(i)- “altering the bed, banks, course or characteristics of a watercourse”

The development involved the revamping of the Peddie Motors Fuel station that included other amenities including but not limited to a KFC, Steers, Debonairs and an OK Express. The water source for the development is abstraction via a borehole positioned at 33°11'40.33"S; 27° 7'9.53"E. This for the purpose of backup sanitation provision and as such resulted in the construction of and yield testing of the borehole. The Water Use Licence application requirement stems from the applicant applying for an abstraction of 300m³/a groundwater which exceeds the General Authorisation limit of 53m³/a, however this abstraction represents 11% of the boreholes sustainable yield and is in capacity of the local aquifer.

This borehole was drilled in 2020 with yield testing occurring in 2021. The recommended utilisation results were as follows:

Table 10: Borehole Utilisation Recommendations.

RECOMMENDATIONS	EC/Q93/0469
Pump Rate l/s	0.25
Duty Cycle (hr/day)	8
Daily Supply (t/day)	7 200
Associated Draw-down (m)	7 - 11
Pumping Water Level (m bgl)	17 – 21
Critical Water Level (mbgl)	55
Pump Inlet Depth (m bgl)	60
Rec Pump Type	0.55 – 1.1 kW Submersible
Problem Species	F; Na; Cl; EC; E.coli & Total Coliforms
Transmissivity (m ² /day)	1.3 – 3.4
Storativity	$4.7 \times 10^{-4} - 1.5 \times 10^{-1}$
Hydraulic Conductivity (K) m/d	$8 \times 10^{-2} - 2.2 \times 10^{-1}$

Extracted from the Geohydrology report on page 24 with permissible extraction rate of 2628 m³/a but a intended usage of 300 m³/a

According to the Water User, civil works involved the clearing of vegetation to make way for earthworks which includes the removal of topsoil and compaction of imported infill material for both the construction of buildings and as the foundation layer for the extension of the development which includes the internal road network. Concrete was either batched on site or imported to the site. Sewerage and domestic services were already in place from the original Peddie motors development. Operational phase involves stormwater and sewerage systems and filling station.

DWS REQUIREMENTS

The following activities constitute water uses which require authorisation in terms of Section 21 of the National Water Act (Act 36 of 1998):

Water Use Activity No.	Listed Activity	Development Activity
Section 21 a Taking water from a water resource.	Abstracting water from a river or borehole for the following purposes: - domestic use - irrigation - watering of livestock - industrial - mining - water bottling, etc.	Construction and operation of a new borehole for the purpose of domestic use
Section 21 c Impeding or diverting the flow of water in a watercourse.	Construction of structures/facilities within surface water resources, e.g. weirs, bridges, pipelines, etc. **This includes any infrastructure within 500m of a wetland or 100m from a river/stream that will have an impact on the identified watercourse	Construction of borehole and revamping of facility within 100m regulated area of a watercourse
Section 21 i Altering the bed, banks, courses or characteristics of a watercourse.	Construction of structures/facilities within surface water resources, e.g. weirs, bridges, pipelines, etc. Introduction of unnatural characteristic to the resource. **This includes any infrastructure within 500m of a wetland or 100m from a river/stream that will have an impact on the identified watercourse	Construction borehole and revamping of facility within 100m regulated area of a watercourse

WATER USE AUTHORISATION PROCESS

The Water Use Licence process will involve the following 3 main project phases:

1. **Pre-Application (Phase 1):** This phase includes consultation with Department of Water and Sanitation (DWS) regarding the proposed development and the potential water use triggers. This is to allow DWS to determine the type of authorisation that will be necessary, to conduct a site inspection and to advise the information requirements per applicable water use licence application
2. **Application:** following pre-application, the applicant then submits the required application for water use licence with the support of technical documents and technical reports.
3. **Screening of technical report (Phase 2):** In this phase the Department of Water and Sanitation screen the technical documents and reports supporting the application. Once this phase is completed the application is either accepted or rejected.
4. **Assessment and Decision (Phase 3):** The water use application and technical reports are then evaluated. Hereafter the decision on the application is made and recommendations are issued.
5. **Appeal Period:** After receipt of the Water Use Licence all registered I&APs and key stakeholders will be notified of its availability and provided with the opportunity and details for submitting an appeal to the decision if required.

PUBLIC PARTICIPATION PROCESS

Section 15 requires public participation in terms of Section 41 (4) of the National Water Act. The public participation process is defined under Regulation No 17 of the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals, gazetted in 2017 (GG 40713).

As a result, the Applicant/ Water User is to give suitable notice in newspapers and other media-

- *Describing the licence applied for;*
- *Stating that written objections may be lodged against the application before a specified date, which must be not less than 60 days after the last publication of the notice;*
- *Giving an address where written objections must be lodged; and*
- *Containing such other particulars as the responsible authority may require;*

In addition to the above, Section 41(4) states that:

- *The applicant is to take such other steps as it may direct to bring the application to the attention of the relevant Organs of State, Interested persons and the General Public; and*
- *To satisfy the responsible authority that the interests of any other person having an interest in the land will not be adversely affected.*

Registered Interested and Affected Parties are hereby given an opportunity to review and comment on the Draft Technical Documents over a 60 day period. All comments raised by I&APs will be included and responded to in the comments and response report which will be submitted to the competent authority (DWS) to enable them to make an informed decision with regard to the water use application.

All persons, organisations and similar are invited to view the application documents and submit any objections via the response sheet at the end of this document.

WATER USE APPLICATION PROCESS

In terms of the National Water Act (Act 36 of 1998) an application for a Water Use Licence will be submitted to DWS for the following water uses: Section 21(a),(c) and (i).

The National Water Act (Act 36 of 1998) in terms of Section 21 includes:

- Section (a) – abstracting water from a water source
- Section 21(c) and (i) – Impeding or diverting the flow of water in a watercourse / and altering the bed, banks or characteristics of a watercourse.

Specialist Studies conducted:

- Desktop Freshwater Assessment
- Geohydrology Assessment
- Environmental Management Plan

This document and Public Participation Process aims to do the following:

- Present stakeholders and I&APs with an overview of the perceived water use impacts that have been identified up to date.
- To obtain issues and concerns from I&APs regarding the Water-use License application process and proposed activity, which will be addressed for the planning, establishment and operational phase of the proposed operations.
- To give all potential interested and affected parties the opportunity to register and be placed on the register of I&APs in order for them to voice their opinions and concerns.

Potential interested and affected parties include:

- Occupants of the site, and where the occupants are not the owners, also to the owners of the site, or the owner of any alternative site where the activity is to be undertaken.
- Owners, persons in control of land or occupants of adjacent properties
- Municipal councillor and municipality
- Any organ of state having jurisdiction in respect of the activity
- Any other party as required by the competent authority

Comments

Kindly submit the attached Comment Sheet, to register as an Interested and Affected Party, with possible issues, objections and concerns relating to the water use activities. The Registration and Comment Sheet should reach us no later than 60 days after

date of this notice. Draft documents will be made available for review to registered I&APs via direct mail link or via our website at www.indwecon.co.za under the “Public Documents” tab.

KEY ISSUES AND TYPICAL IMPACTS

Key issues and typical water use and water resource impacts associated with the project identified to date include:

- Potential over extraction of borehole water
- Pollution of adjacent watercourse
- Loss of Riparian area of adjacent watercourse
- Invasive alien vegetation growth
- Sedimentation of adjacent watercourse

DETAILS OF THE EAP CONDUCTING THE BASIC ASSESSMENT

Indwe Environmental Consulting CC is a registered environmental consultancy that specialises in all facets of environmental management. Our focus is on project based environmental studies. Broadly the services offered are Basic Assessments, Full Environmental Impact Assessments, Rectification of Non-Compliance Activities and Applications, Strategic Environmental studies (State of the Environment Reporting, Strategic Environmental Assessments, Environmental Management Frameworks) and integrated waste management planning.

The Indwe Environmental Consulting team is headed up and overseen by Brendon Steytler and Megan Hugo. Together they have a vast amount of experience in the environmental consulting industry of South Africa. Brendon Steytler was the founding member of Indwe Environmental Consulting in 2010 and has been instrumental in growing the company into the trusted and quality driven organisation that it is today.

Megan joined Indwe Environmental Consulting in September 2017 and was made a main member of the company in April 2018. Megan is a Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (Reg. No 2019/1530). EAPASA is the single Registration Authority for EAPs in South Africa. Megan is also registered as a Candidate Natural Scientist with the South African Council for Natural Scientific Professions (Cand. Sci. Nat 118810) and an active paid up member of the International Association of Impact Assessment (IAIA) South Africa. Megan has been working as an Environmental Consultant since February 2015 and is responsible for all company related operations and financial management as well as acquiring new projects at Indwe Environmental Consulting. Megan has experience in all aspects of Integrated Environmental Management (Environmental Impact Assessments, Basic Assessments, Mining Permitting, Auditing, Strategic Environmental Planning), Ecological Reporting and General Project Management. She has undertaken a range Environmental Impact Assessments for projects in both the private and public sectors as well as various non-compliance applications for commercial, agricultural and residential project. **Megan acts as the internal reviewer and supervisor for this project.**

Nicola joined Indwe Environmental Consulting as a Junior Environmental Consultant in March 2019 following the completion of her Master of Science Degree in Geography (Environmental Wetland Management) from Nelson Mandela University. Nicola became a member of the Golden Key International Honour Society in 2015 and was awarded the Nelson Mandela University Honours and Masters Postgraduate Research Scholarship as well as the Masters National Research Foundation Scholarship. During Nicola’s studies at Nelson Mandela University, Nicola worked part time for a well known construction company formulating and completing Environmental Management Plans, Waste Management Plans, environmental work instructions, Health, Safety and Environment Risk Assessments and the like. Nicola has completed various courses in water quality management and GIS mapping and analysis. Nicola is a Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (Reg. No 2019/743). EAPASA is the single Registration Authority for EAPs in South Africa. Nicola is also registered as a Candidate Natural Scientist with the South African Council for Natural Scientific Professions (Cand. Sci. Nat 121556) and an active paid up member of the International Association of Impact Assessment (IAIA) South Africa. Nicola has strong GIS skills and is responsible and/ or assists in GIS mapping and analysis, technical report writing, public participation and project management. **Nicola acts as main author and contact for the project.**

YOUR OPPORTUNITY TO GET INVOLVED

Should you wish to express your views regarding this development, please feel free to register as an I&AP by sending us your written comments. Please submit your name, contact information and written comments to the contact person below. A written comments form is supplied at the back end of this notice for your convenience.

Contact

Nicola Monks
Indwe Environmental Consulting
2 Ayr Place
Bonnie Doon
East London
5241

Tel: 043 555 0656

E-mail: nicola@indwecon.co.za

personal data will be stored, used and processed. You consent that your details, where applicable, will be visible to the public through the National Water Act Procedural Regulations, 2017, as amended process as part of this project.