



# environment & tourism

Department:  
Environmental Affairs and Tourism  
REPUBLIC OF SOUTH AFRICA

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Ref. 12/9/11/P86

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**PERMIT NUMBER:** 12/9/11/P86

**CLASS:** H:H (USED OIL STORAGE AND TREATMENT)

**WASTE DISPOSAL SITE** FFS REFINERS (PTY) LIMITED (PIETERMARITZBURG)

**LOCATION:** SUB 12 OF LOT 86, PIETERMARITZBURG

**APPLICANT:** FFS REFINERS (PTY) LIMITED

**ADDRESS:** P.O BOX 22909, SOUTHGATE, 3200. TEL: (27 33 3981651)

**PERMIT ISSUED IN TERMS OF SECTION 20 OF THE ENVIRONMENT CONSERVATION ACT, 1989  
(ACT NO. 73 OF 1989) AS AMENDED**

I, Joanne Yawitch, in my capacity as Deputy Director General: Environmental Quality Protection of the National Department of Environmental Affairs and Tourism (hereinafter referred to as "the Department"), in terms of section 20(1) of the Environment Conservation Act, 1989 (Act No. 73 of 1989) (as amended), hereby authorise the abovementioned Permit Holder to operate the abovementioned used oil storage and treatment facility, subject to the conditions specified herein.



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In this Permit, "Director" means the Director: Authorisations and Waste Disposal Management of the National Department of Environmental Affairs and Tourism who may be contacted at the address below:

Director: Authorisations and Waste Disposal Management  
Department of Environmental Affairs and Tourism  
Private Bag X447  
PRETORIA  
0001

In this Permit, "Director: RPW" means the Director: Resource Protection and Waste of the National Department of Water Affairs and Forestry who may be contacted at the address below:

Regional Manager: Resource Protection and Waste  
Department of Water Affairs and Forestry  
Private Bag X 313  
PRETORIA  
0001

**1 SITE DETAILS**

**1.1 LOCATION**

1.1.1 This permit authorises the operation of the used oil storage and treatment facility for FFS Refiners (PTY) LTD on Sub 12 of Lot 86, Pietermaritzburg in KwaZulu Natal Province (hereafter referred to as "the Site").

1.1.2 The location of the site must be according to the co-ordinates of the four corners of the site as shown below:

Number of corner	Latitude	Longitude
1	30 20 587 E	29 38 091S
2	30 20 730E	29 38 183S
3	30 20 543E	29 38 121S
4	30 20 658E	29 38 234S



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**1.2 DOCUMENTS CONSIDERED**

- 1.2.1 2.5.1EIA/4068 Hydrogenation Plant Authorisation
- 1.2.2 DC22/EX/0010/06 De-Ashing Authorisation
- 1.2.3 16/2/7/U203/E15 DWAF Exemption to FFS dated 2002
- 1.2.4 DWAF RoD

**PERMIT CONDITIONS**

**1.3 SITE SECURITY AND ACCESS CONTROL**

- 1.3.1 Weatherproof, durable and legible notices in at least three official languages applicable in the area must be displayed at each entrance to the Site. These notices must prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the Permit Holder and the person responsible for the operation of the Site.
- 1.3.2 The Permit Holder must ensure effective access control to prevent unauthorised entry. Internationally acceptable signs indicating the risks involved must be displayed at each entrance.
- 1.3.3 The Permit Holder must prevent the storage and treatment of waste which is not authorised for storage and treatment at the site.

**2. MANAGEMENT**

**2.1 GENERAL MANAGEMENT**

- 2.1.1 The activities shall be managed and operated:
  - a) in accordance with a documented environmental management system, that inter alia identifies and minimises risks of pollution, including those arising from operations, accidents, incidents and non-conformances and those drawn to the attention of the permit holder as a result of complaints;
  - b) in accordance with the 1998 DWAF "Minimum Requirements for Handling, Classification and Disposal of Hazardous Waste, Waste Management Series of documents (hereinafter referred to as "Minimum Requirements"), and norms and standards developed by the Department in future.



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- c) in accordance with conditions of this permit and any other written instruction by the Director;
  - d) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.
- 2.1.2 Any persons having duties that are or may be affected by the matters set out in this Permit shall have convenient access to a copy.
- 2.2 **EMERGENCY PREPAREDNESS PLAN**
- 2.2.1 The Permit Holder must maintain and implement a befitting documented emergency preparedness plan and review it annually and after each emergency and or major accident. The plan must, amongst others, include:
  - a) Power failure
  - b) Vehicle&/machinery malfunction
  - c) Site Fire
  - d) Spillage (on route and on Site)
  - e) Natural disasters such as floods
  - f) Industrial action
- 3. **PERMISSIBLE WASTE**
- 3.1 Any portion of the Site, which has been constructed or developed according to condition 4, may be used for the storage and treatment of used oil and general waste generated as part of day-to-day operations within the premises.
- 3.2 Disposal of contaminated solids must be at a hazardous waste disposal site unless the Director has issued a de-listing authorisation for disposal at a site of a lower class.
- 4. **CONSTRUCTION**
- 4.1 The Site or any portion thereof may only be used for the storage and treatment of used oil if the Site or any such portion has been constructed or developed according to the conditions listed under condition 4 of this Permit.
- 4.2 The Site construction (existing and new) must be approved by a registered professional engineer as compliant with recognised civil engineering standards and adequately lined to protect surface and ground water resources.



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- 4.3 The storage and treatment area must have firm, impermeable, and chemical resistant floors and a roof to prevent direct sunlight and rain water from getting in contact with the waste.
- 4.4 The storage and treatment area must have bunded walls with adequate capacity to contain the maximum volume that is stored in the area. The area must have adequate drainage system in line with condition 4.2 above. Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the site
- 4.5 The permit holder must make provision for sanitation facilities on site in line with the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

**5. GENERAL OPERATION AND IMPACT MANAGEMENT**

**5.1 IMPACT MANAGEMENT**

- 5.1.1 Permit holder must ensure that fugitive emissions of substances (excluding odour and noise) shall not cause pollution.
- 5.1.2 Permit holder must ensure that all liquid wastes, whose emissions to water or land could cause pollution, shall be provided with secondary containment and or diverted to sewer only after receiving written approval from the relevant authority.
- 5.1.3 Permit holder must ensure that emissions from the activities shall be free from odour and noise at levels likely to cause annoyance, harm or disturb the peace of interested and affected parties.

**5.2 OPERATION:**

- 5.2.1 Waste containers must at all times be located under an area that conforms to condition 4.3 above.
- 5.2.2 The integrity of the waterproof base and bund walls must be routinely monitored and corrective action taken before containment integrity is breached. All bunding and hard surfacing of areas must comply with SABS Code 089.
- 5.2.3 All contaminated runoff from the storage and treatment areas, process wastewater and wash water must be diverted to the effluent treatment facility and diverted to sewer only after receiving written approval from relevant municipality.
- 5.2.4 Waste that is not permissible under condition 3 must not enter the site.



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- 5.2.5 Permit holder must prevent spillages; where they happen nonetheless, condition 2.2.1 above should be improved and the permit holder must ensure the effective and safe clean-up of such spillages.
- 5.2.6 Permit holder must ensure that the site is operated in such a manner that nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards, are prevented.
- 5.2.7 Permit holder must ensure the health and safety of workers and employees on site, in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).
- 5.2.8 Permit Holder must ensure that all personnel who work with hazardous waste are trained to deal with these potentially hazardous situations so as to minimise the risks involved and to deal with spillages in a proper way should they occur.

**6. MONITORING**

**6.1 MONITORING METHODS AND PARAMETERS**

- 6.1.1 The Permit Holder must carry out all tests required in terms of this permit in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 1982 (Act 30 of 1982).
- 6.1.2 The Permit Holder must put in place a monitoring and measurement plan that must amongst others include water quality monitoring

**6.2 GROUNDWATER QUALITY MONITORING**

- 6.2.1 Permit Holder must conduct a geo-hydrological assessment to determine groundwater quality monitoring needs within 3 months from the date of this permit.
- 6.2.2 Where boreholes are required as per condition 6.2.1 above, the boreholes must be equipped with lockable caps. The Department reserves the right to take water samples at any time and to analyse these samples, or to have them taken and analysed.
- 6.2.3 Surface water monitoring must be performed within the first hour of rain in all storm water drains outlets that discharges to the natural environment.
- 6.2.4 Monitoring for treated effluent including contaminated runoff water, which is discharged into the natural environment must be conducted at the point where the leachate exits the treatment facility; and/or oil separator.



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**6.3 BACKGROUND MONITORING**

- 6.3.1 Samples from the borehole as required in condition 6.2.1 above, where the groundwater in the borehole is at an expected higher hydraulic pressure level as the hydraulic pressure level of the groundwater under the site, must be considered as background monitoring. Background groundwater monitoring must be conducted for the water quality variables listed in Annexure I or Annexure II.

**6.4 DETECTION MONITORING**

- 6.4.1 Monitoring must be conducted bi-annually or such frequency as may be determined by the Director for the water quality variables listed in Annexure II (a & b).

**6.5 INVESTIGATIVE MONITORING**

- 6.5.1 If in the opinion of the Director and Director: RPW, a groundwater quality variable at any monitoring point listed under the detection monitoring programme, as referred to in condition 6.4 above, shows an increasing trend, the Permit Holder shall initiate a monthly monitoring programme for the water quality variables listed in Annexure I (a and b).

**6.6 AIR QUALITY MONITORING**

- 6.6.1 Permit Holder must conduct must assess air quality monitoring needs within 3 months from the date of this permit.

- 6.6.2 The permit holder must conduct monitoring of VOC compounds, SO<sub>2</sub> and NO<sub>x</sub> twice a year for inclusion in the external audit reports. The Department reserves the right to request further air quality monitoring depending on the results and the assessment in condition 6.6.1 above.

**7. INVESTIGATIONS**

- 7.1 If, in the opinion of the Director, environmental pollution, nuisances or health risks may be or is occurring on the Site, the Permit Holder must initiate an investigation into the cause of the problem or suspected problem.

- 7.2 If, in the opinion of the Director and/or Director: RPW, water pollution may be or is occurring the permit holder must initiate an investigation into the cause of the problem or suspected problem. Such investigation must include the monitoring of the water quality variables, at those monitoring points and such frequency as may be specified by Director: RPW.



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- 7.3 Investigations carried out in terms of conditions 7.1 and 7.2 above must include the monitoring of the relevant environmental pollution, nuisance and health risk variables, at those monitoring points and such frequency to be determined in consultation with the Director.
- 7.4 Should the investigation carried out as per conditions 7.1 and 7.2 above reveal any unacceptable levels of pollution, the Permit Holder must submit mitigation measures to the satisfaction of the Director.

**8. RECORDS**

- 8.1 The permit holder must keep records and update all the information referred to in Annexure III and submit this information to the Director on an annual basis.
- 8.2 All records required or resulting from activities required by this permit must:
- (a) be legible;
  - (b) be made as soon as reasonably practicable and should form part of the external audit report;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable and
  - (d) be retained in accordance with a documented procedures which is approved by the Department.
- 8.3 The permit holder must record all borehole data and chemical analyses in the format attached as Annexure IV.
- 8.4 Records demonstrating compliance with condition 2.1.1 must be maintained.
- 8.5 Records of training and verification of competence as per condition 5.2.8 above must be kept by the permit holder.

**9. REPORTING**

- 9.1 The permit holder must, within 24 hours notify the Director of the occurrence or detection of any incident on the Site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.





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- 9.2 The permit holder must, within 14 days, or a shorter period of time, if specified by the Director from the occurrence or detection of any incident referred to in condition 9.1, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Director and/or the Director: RPW of measures taken to –
- a) correct the impact resulting from the incident;
  - b) prevent the incident from causing any further impact; and
  - c) prevent a recurrence of a similar incident.
- 9.3 In the event that measures have not been implemented within 21 days of the incident to address impacts caused by the incident referred to in condition 9.1, or measures which have been implemented are inadequate, the Director may implement the necessary measures at the cost and risk of the Permit Holder.
- 9.4 The permit holder must keep an incident and complaints register, which must be attached to the External audit report.
- 9.5 The Department must be notified without delay in the case of the following:
- a) any malfunction, breakdown or failure of equipment or techniques, accident or fugitive emission which has caused, is causing or may cause significant pollution;
  - b) the breach of this permit; and
  - c) any significant adverse environmental and health effects.
- 9.6 Prior written notification must be given to the Director of the following events and in the specified timescales.
- a) as soon as practicable prior to the permanent cessation of any operational activities
  - b) full or partial cessation of the operational activities for a period likely to exceed 3 months
  - b) full or partial resumption of the operation of all or part of the activities after a cessation notified under (b) above
  - d) the professional engineer appointed by the permit holder in line with condition 4.2 must make a signed declaration that condition 4.2, above has been adhered to.
- 9.7 The Department must be notified within 7 days of any changes to the management of the site including the name of the incoming person together with evidence that such person has the required technical competence.



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- 9.8 The Department must be notified within 14 days of the following changes:
- a) Permit holder's trading name, registered name or registered office address;
  - b) Particular's of the permit holder's ultimate holding company (including details of an ultimate holding where a permit holder has become a subsidiary;
  - c) steps taken with a view to the permit holder , or any one of them, going into bankruptcy, entering into composition or arrangement with creditors, or ,in the case of them being in a partnership, dissolving the partnership.
- 9.9 Each external audit report referred to in condition 10.2 below must be submitted to the Director within 30 days from the date on which the external auditor finalised the audit.

**10. AUDITING**

**10.1 INTERNAL AUDITS**

- 10.1.1 Internal audits must be conducted quarterly by the permit holder and on each audit occasion an official report must be compiled by the relevant auditor to report the findings of the audits, which must be made available to the external auditor specified in condition 10.2.1.

**10.2 EXTERNAL AUDITS**

- 10.2.1 The permit holder must appoint an independent external auditor to audit the site annually and thereafter compile an audit report for submission to the Director in terms of condition 9.9 above.
- 10.2.2 The audit report must
- a) specifically state whether conditions of this permit are adhered to.
  - b) include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment.
  - c) Specify target dates for the implementation of the recommendations by the permit holder to achieve compliance.



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- d) contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the permit holder and whether corrective action taken for the previous audit non conformities was adequate.
- e) show monitoring results graphically and conduct trend analysis

**10.3 DEPARTMENTAL AUDITS AND INSPECTIONS**

- 10.3.1 The Department reserves the right to audit or inspect the Site without prior notification at any time and frequency as may be determined by the Director.
- 10.3.2 The permit holder must make any records or documentation available to the Director upon request, as well as any other information he/she may require.
- 10.3.3 The findings of these audits or inspections must be made available to the permit holder within 30 days of the end of the audit or inspection. Information from the audits must be treated in accordance with the Promotion of Access to Information Act, 2000 (Act 2 of 2000).

**11. REHABILITATION AND CLOSURE OF THE SITE**

- 11.1 The Permit Holder must rehabilitate the Site or any portion thereof, in accordance with a closure report and rehabilitation plan, which must be submitted to the Director for approval at least one year prior to the intended closure of the Site, or any portion thereof.
- 11.2 The Permit Holder shall remain responsible for the Site, or any of its impacts on the environment, after operations on the site have ceased.

**12. LEASING AND ALIENATION OF THE SITE**

- 12.1 Should the permit holder want to alienate or lease the site, he/she shall notify the Director in writing of such an intention at least 120 days prior to the said transaction.
- 12.2 Should the permit holder want to transfer holder-ship of this, he/she shall notify and obtain approval from the Director for such a transfer, at least 120 days prior to the said transfer.
- 12.3 Any subsequent permit holder shall be bound by the conditions of this permit.



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**13. GENERAL**

- 13.1 This permit shall not be transferable unless such transfer is subject to condition 12.2
- 13.2 This permit shall not be construed as exempting the permit holder from compliance with the provisions of the National and Provincial Legislation and any relevant Ordinance, Regulation, By-laws and relevant National Standards and norms.
- 13.3 Transgression of any condition of this permit could result in the validity of the permit being terminated by the Department.
- 13.4 This permit is valid for a period of five (5) years and depending on compliance to permit conditions, recommendations from audit reports and or changing legislation, the Permit could be amended or withdrawn or validity thereof extended.
- 13.5 The permit holder must identify immediate neighbours and convene a meeting to ensure that they are aware of procedures to report complaints and compliments.

  
**Ms. Joanne Yawitch**  
**DEPUTY DIRECTOR GENERAL**

**DATE:** 25/02/09



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**ANNEXURE I**

**WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND AND INVESTIGATIVE MONITORING: CONDITION 6.3.1 AND 6.5.1**

**a.**

Alkalinity (P.Alk)  
Boron (B)  
Cadmium (Cd)  
Calcium (Ca)  
Chemical Oxygen Demand (COD)  
Biological Oxygen Demand (BOD)  
Chromium (hexavalent) ( $\text{Cr}^{6+}$ )  
Chromium (Total) (Cr)  
Chloride (Cl)  
Cyanide (CN)  
Electrical conductivity (EC)  
Free & saline ammonia as N ( $\text{NH}_4\text{-N}$ )  
Lead (Pb)  
Magnesium (Mg)  
Mercury (Hg)  
Nitrate (as N) ( $\text{NO}_3\text{-N}$ )  
pH  
Phenolic compounds (Phen)  
Potassium (K)  
Sodium (Na)  
Sulphate ( $\text{SO}_4$ )  
Total dissolved solids (TDS)

**b.**

Fluoride (F)  
Biological Oxygen Demand (BOD)  
Total organic carbon (TOC)  
Total organic halogen (TOX)  
Volatile organic compounds



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**ANNEXURE II**

**WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND AND DETECTION MONITORING:  
CONDITIONS 6.3.1 AND 6.4.1**

a. Monitor at bi-annual intervals for:

Alkalinity (P.Alk)  
Chemical Oxygen Demand (COD)  
Chlorides (Cl)  
Nitrate (NO<sub>3</sub>-N)  
pH  
Potassium (K)  
Total Dissolved Solids (TDS)

b. Monitor at annual intervals for:

i. Electrical Conductivity (EC)

Calcium (Ca)  
Fluoride (F)  
Magnesium (Mg)  
Sodium (Na)  
Sulphate (SO<sub>4</sub>)

ii. Electrical Conductivity

Calcium (Ca)  
Fluoride (F)  
Magnesium (Mg)  
Sodium (Na)  
Sulphate (SO<sub>4</sub>)  
Total Organic Carbon (TOC)  
Total Organic Halogen (TOX)

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### ANNEXURE III

**INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS: CONDITION 8.1**

\* = Indicate with an X. Please print legibly.

NAME OF SITE: \_\_\_\_\_ DATE OF REPORT: \_\_\_\_\_ (y/m/d)

1. Registered owner(s) of property on which disposal site is situated:

Name	Telephone	
Postal Address	Fax	
	Postal Code	

2. Operator in control of storage site:

<b>Name</b>		Telephone	
Identity number		Tel. After hours	
Educational Qualifications			
Other Relevant competencies:			

3. Indicate the following:

Parameter	Quantity (m <sup>3</sup> annum <sup>-1</sup> )
Volume of used oil received	
Volume of processed oil dispatched from the Site	
Volume of hazardous waste dispatched for disposal on a permitted site	

4. Indicate the type of waste and approximate quantities of waste reused, recycled, recovered, treated, or disposed of during the year.:

Type of waste	Quantity ( $\text{m}^3 \text{ annum}^{-1}$ )	reused disposed	recycled,	recovered,	treated,	or
TOTAL						

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5. RISK ASSESSMENT: ANNEXURE III continued[illegible]





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I, the undersigned, declare that the information stated above is to my knowledge a true reflection of the status at the \_\_\_\_\_ waste storage and treatment site.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Capacity: \_\_\_\_\_

Place: \_\_\_\_\_ Date \_\_\_\_\_



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**ANNEXURE IV**

**FORM TO BE USED FOR CHEMICAL INFORMATION CONDITIONS 8.3**

Name of site							
Borehole/observation- point name/number							
Sampling date (y-m-d):				Method:	Bail		
Sampling Time					Pump		
Time after start of pump:		h min		Depth of sample		m	
Date of analysis (y-m-d)				Laboratory			
Constituent	Unit	Required Standard	Value	Constituent	Unit	Required Standard	Value
pH	(-log[H <sup>+</sup> ])			As (III)	(mg/l)		
EC	(mS/m)			B	(mg/l)		
TDS	(mg/l)			Cd	(mg/l)		
Ca	(mg/l)			Free CN	(mg/l)		
Mg	(mg/l)			Cr (Total)	(mg/l)		
Na	(mg/l)			Cr (VI)	(mg/l)		
K	(mg/l)			Cu	(mg/l)		
Alkalinity	(mg CaCO <sub>3</sub> /l)			Mn	(mg/l)		
Cl	(mg/l)			Pb	(mg/l)		
SO <sub>4</sub>	(mg/l)			Hg	(mg/l)		
NO <sub>3</sub> -N	(mg/l)			S-	(mg/l)		
F	(mg/l)			Phenol			
COD	(mg/l)			PO <sub>4</sub>			
NH <sub>4</sub> -N	(mg/l)			TOX			
Ba	(mg/l)			TOC			