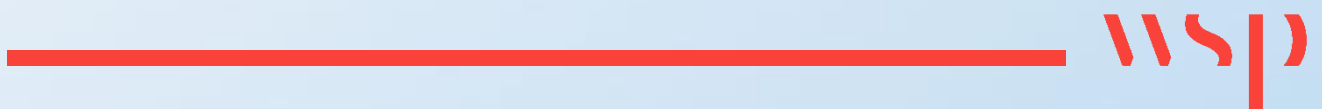


Appendix G

WASTE MANAGEMENT LICENCES



Appendix G.1

OLD HAZARDOUS WASTE DISPOSAL FACILITY





environmental affairs

Department
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 PRETORIA 0001 Fedsure Building 315 Pretorius Street PRETORIA
Tel (+ 27 12) 310 3911 Fax (+ 2712) 322 2682

Ref: 12/9/11/L102/5

Enquiries: Mr MM Tshitangoni

**Tel. 012 310 3380 Fax: 12 310 3753 Email Address: mtshitangoni@environment.gov.za
www.environment.gov.za**

Tubatse Chrome
Private bag x 504
Steelpoort
1133

Fax: 013 230 9401

Dear licence holder

Please find hereto attached a waste licence issued in terms of S.49 of the National Environmental Management: Waste Act, 2008, (Act 59 of 2008) "NEMWA".

This is to advise you that applications for authorisation of licence amendments, waste delisting, emergency and or once-off authorisations will be processed only if the Department of Environmental Affairs is in receipt of the latest external audit report, and any other reports required to be submitted to the department in terms of the attached licence. Please note section 54 of NEMWA.

Yours Sincerely


Ms Nolwazi Cobbinah

Acting Deputy Director-General :Environmental Quality and Protection

Department of Environmental Affairs

Letter signed by Mr Mpho Tshitangoni

Designation: Acting Director: Authorisations and Waste Disposal Management

Date: 01/12/2010



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Ref. 12/9/11/L102/5

Enquiries: Mr. M. Tshitangoni

Tel: (012) 310-3380

Fax: (012) 310-3753

Email: mtshitangoni@environment.gov.za

www.environment.gov.za

LICENCE NUMBER:

12/9/11/L102/5

CLASS:

H:H (CLOSURE)

WASTE DISPOSAL SITE:

TUBATSE CHROME (H:H CELL)

LOCATION:

THE FARM GOUDMYN 337 KT, IN GREATER
TUBATSE LOCAL MUNICIPALITY, WITHIN THE
LIMPOPO PROVINCE

LICENCE HOLDER:

TUBATSE CHROME

ADDRESS:

PRIVATE BAG X 504, STEELPOORT, 1133

CONTACT DETAILS

JACOBUS CHRISTOFFEL VAN NIEKERK

TEL (013) 230 8214, FAX (013) 230 9401

LICENCE IN TERMS OF SECTION 49(1)(a) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008)

In terms of National Environmental Management: Waste Act, 2008 (Act No.59 of 2008) read with the Environmental Impact Assessment Regulations, 2006, published in Government Notice No R.385 of 21 April 2006 (the Regulations), the Deputy Director General: Environmental Quality and Protection, Acting under delegation, hereby grant the Tubatse Chrome a Waste Management Licence for the following waste management activities as listed in Category A of Government Notice No 718 dated 03 July 2009:

(20) The decommissioning of activities listed in this schedule



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H:H - Decommissioning of the H:H cell Tubatse chrome

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

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

In this Licence, "Chief Director" means the Chief Director: Water Use of the National Department of Water Affairs "DWA" who may be contacted at the address below:

Chief Director: Water Use
Department of Water Affairs
Private Bag 313
PRETORIA
0001

LICENCE CONDITION

1 SITE DETAILS

1.1 LOCATION

1.1.1 This Licence authorises the decommissioning and rehabilitation of Tubatse Chrome H:H cell situated on the Farm Goudmyn 337 KT in Greater Tubatse Local Municipality within the Limpopo Province (hereinafter referred to as "the Site") according to Tubatse Chrome Licence application report for the closure of the H:H cell at Tubatse Chrome, near Steelpoort, compiled by Golder and Associates, dated March 2010, submitted by the Applicant.

1.1.2 The location of the Site shall be according to the co-ordinates indicated on the Licence application form submitted by the Applicant which is defined as follows:

Number of Corner	Latitude (S)	Longitude (E)
Corner 1	24° 44' 52.39"	30° 11' 45.07"
Corner 2	24° 44' 51.45"	30° 11' 48.63"
Corner 3	24° 44' 53.26"	30° 11' 49.55"
Corner 4	24° 44' 55.35"	30° 11' 45.54"
Corner 5	24° 44' 54.06"	30° 11' 44.27"
Corner 6	24° 44' 53.15"	30° 11' 44.40"

1.2 DOCUMENTS CONSIDERED

1.2.1 Tubatse Chrome Licence application report for the closure of the H:H cell at Tubatse Chrome, near Steelpoort compiled by Golder and Associates, dated May 2010



H:H - Decommissioning of the H:H cell Tubatse chrome

- 1.2.2 A Record of Decision (RoD) issued by the Department of Water Affairs, dated August 2010
- 1.2.3 Waste Management Licence application form dated 11 May 2010

LICENCE CONDITIONS

1.3 SITE MANAGEMENT

- 1.3.1 Decommission and rehabilitation activities must be managed and operated:

(a) in accordance with requirements for closure specified in the latest edition (currently, 1998) of the "Minimum Requirements for Waste Disposal by Landfill" series of documents published by the Department of Water Affairs or any other instruction by the Director that inter alia identifies and minimises risks of pollution, including those arising from construction, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the licence holder as a result of complaints

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

- 1.3.3 Any persons having duties that are or may be affected by the matters set out in this Licence must have convenient access to a copy of which must be, kept at or near the place where those duties are carried out.

2 EMERGENCY PREPAREDNESS PLAN

- 2.2.1 The Licence Holder must maintain and implement an emergency preparedness plan and review it annually for inclusion in the compilation of the external audit report and after each emergency and major accident. The plan must among others, include measures to address:

- a) Site fire
- b) Leak detection
- c) Natural disaster such as floods
- d) Slope failure
- e) The plan must include contact details of the nearest police station, ambulance services and any other emergency centre.

3 ACCESS CONTROL

- 3.1 The Licence Holder must ensure effective access control to the Site to reasonably prevent unauthorised entry. Signs indicating the risks involved in unauthorised entry must be displayed at each entrance.



- 3.2 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 Licence Holder and the person responsible for the operation of the Site.

4 CONSTRUCTION OF REMEDIATION MEASURES

- 4.1 Immediately following the cessation of operations with the intention to decommission the Site, no more waste must be accepted for disposal on site.
- 4.2 Decommissioning construction and rehabilitation within the Site must be carried out in accordance with the following approved civil drawings number 5966-39-LL-01; 5966-39-DT-03; P00 and 5966-39-DT-04 and in accordance with recognised civil engineering practice with special consideration to stability, and under the leadership of a registered engineer who must send a letter or a certificate to the Director every year until completion to certify that construction and decommissioning activities are compliant with engineering standards and plans approved by the Director.
- 4.3 Drainage systems, capping of the side slopes and top of the site must be constructed and maintained by the Licence Holder to ensure that excess water does not enter the waste body.
- 4.4 The construction for closure of the site must be in accordance with the latest edition of the documents titled: "Minimum requirements for Waste Disposal by Landfill" or any other disposal site closure requirements developed by the Department in future.
- 4.5 The slopes of the walls of the waste disposal cells on the site must be not steeper than 1 vertical to 3 horizontal length units, unless an equivalent engineered alternative has been approved by the Director.
- 4.6 Works constructed in compliance with condition 4.2 must be of such a capacity as to maintain a freeboard of half a metre and to accommodate-
- 4.6.1 All stormwater runoff, which could be expected as a results of the estimated maximum precipitation during a period of 24 hours with an average frequency of once in fifty years and all expected leachate.
- 4.7 All runoff (stormwater) arising as a results of precipitation on the land adjacent to the Site must be prevented from entering the Site.
- 4.8 Uncontaminated runoff water must under no circumstances be used to dilute leachate emanating from the site but must be discharged into the nearest stormwater channel.



5 MONITORING

5.1 MONITORING METHODS AND PARAMETERS

- 5.1.1 The Licence Holder must carry out all tests required in this Licence in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act 8 of 2008).

5.2 WATER QUALITY MONITORING

- 5.2.1 The monitoring borehole network for the site must be maintained by the Licence Holder to ensure unobstructed sampling at all times. The monitoring borehole network for the site must be according to the co-ordinates indicated below:-

Codes of boreholes	Latitude	Longitude	Positions
BH11	24° 44' 45.75"	30° 11' 24.24"	Downstream
BHC	24° 44' 37.17"	30° 11' 52.9"	Downstream
SRK100	24° 44' 53.67"	30° 12' 0.28"	Upstream
SRK105	24° 44' 56.33"	30° 11' 37.17"	Upstream
BH10	24° 44' 40.48"	30° 11' 42.22"	Downstream

- 5.2.2 Monitoring 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.

- 5.2.3 The Licence Holder must monitor surface water quality for the parameters listed in Annexure II below at locations it is discharged to the natural environment.

- 5.2.4 Groundwater monitoring by the Licence Holder, in accordance with conditions 5.4.1, must continue and be maintained for a period of 30 years after closure, or for such a period and/or frequency as approved by the Director or Chief Director: Water Use.

5.3 BACKGROUND MONITORING

- 5.3.1 Samples from the boreholes mentioned in condition 5.2.1 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 during each monitoring occasion for the water quality variables listed in Annexure II and Annexure III.

5.4 DETECTION MONITORING

- 5.4.1 Monitoring must be conducted bi-annually for the water quality variables listed in paragraph (a) of Annexure III and annually for the variables listed in paragraph (b) of Annexure III at locations specified in condition 5.3.1 or such frequency as may be determined by the Director or Chief Director: Water Use.



- 5.4.2 Monitoring of leachate must be conducted bi-annually for such frequency as may be determined by the Director for water quality variables listed in annexure III (a and b).

5.5 INVESTIGATIVE MONITORING

- 5.5.1 If, in the opinion of Chief Director: Water Use, a water quality variable listed under the detection monitoring programme, as referred to in condition 5.4.1, shows an increasing trend, the Licence Holder must initiate a monthly monitoring programme for the water quality variables listed in Annexure II.

5.6 FURTHER INVESTIGATIONS

5.6.1 WATER POLLUTION

- 5.6.1.1 If, in the opinion of the Chief Director: Water Use, groundwater and surface water pollution have occurred or may possibly occur the Licence Holder must conduct and/or appoint specialists to conduct the necessary investigations and implement additional monitoring and rehabilitation measures to the satisfaction of the Chief Director: Water Use.

- 5.6.1.2 The latest groundwater quality report which includes organic, inorganic and physical results of three past year(2009/2010) for the suggested monitoring boreholes as well as monitoring surface water results must be submitted to the Department within three months(3) of the date of this Licence.

5.6.2 ENVIRONMENTAL POLLUTION

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

6 AUDITING

6.1 INTERNAL AUDITS

- 6.1.1 Internal audits must be conducted quarterly by the Licence 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 8.2.1.



6.2 EXTERNAL AUDITS

6.2.1 The Licence Holder must appoint an independent external auditor to audit the site biannually and this auditor must compile an audit report documenting the findings of the audit, which must be submitted by the Licence Holder according to condition 10.9 below.

6.2.2 The audit report must:

- a) specifically state whether conditions of this Licence 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 Licence holder to achieve compliance.
- d) contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the Licence Holder and whether corrective action taken for the previous audit non conformities was adequate.
- e) show monitoring results graphically and conduct trend analysis

6.3 DEPARTMENTAL AUDITS AND INSPECTIONS

6.3.1 The Department and DWA reserve the right to audit and/or inspect the Site at any time and at such a frequency as the Director and Chief Director: Water Use may decide, or to have the Site audited or inspected.

6.3.2 The Licence Holder must make any records or documentation available to the Director and Chief Director: Water Use upon request, as well as any other information they may require.

6.3.3 The findings of these audits or inspections must be made available to the Licence Holder within 60 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).

7 RECORDING

7.1 The Licence Holder must keep a record of and update all the information referred to in Annexure IV on an annual basis.

7.2 The Licence Holder must record all borehole data and chemical analyses in the format depicted in Annexure V.

7.3 Records demonstrating compliance with condition 2.1.1 and any other required by this Licence must be maintained.



8 REPORTING

8.1 REPORTING OF INCIDENTS

8.1.1 The Licence Holder must, within 24 hours, notify the Director and the Chief Director: Water Use, 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 environmental pollution, water pollution, health risks or nuisance conditions.

8.1.2 The Licence Holder must, within 14 days, or a shorter period of time, if specified by the Head of Department and Regional Head of Department, from the occurrence or detection of any incident referred to in condition 8.1.1, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Director and the Chief Director: Water Use of measures taken to –

8.1.2.1 correct the impact resulting from the incident;

8.1.2.2 prevent the incident from causing any further impact; and

8.1.2.3 prevent a recurrence of a similar incident.

8.1.3 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 8.1.1, or measures which have been implemented are inadequate, the Director and the Chief Director: Water Use, may implement the necessary measures at the cost and risk of the Licence Holder.

8.1.4 The Licence Holder must keep an incident report and complaints register, which must be made available to both the external, Departmental and DWA auditors for the purpose of their audits.

8.1.5 Records generated in terms of condition 7 above and any other records generated as a result of this Licence must be interpreted and included in the audit report in terms of condition 6.1.2 above must be submitted to the Director.

9 LEASING AND ALIENATION OF THE SITE

9.1 Should the Licence Holder want to alienate or lease the Site, he shall notify the Head of Department in writing of such an intention at least 120 days prior to the said transaction.

9.2 Should the Licence Holder want to transfer the Licence of the Site, he shall notify and obtain approval from the Director for such a transfer in writing at least 120 days prior to the said transfer.

9.3 Any subsequent Licence Holder shall be bound by the conditions of this Licence.



10 REHABILITATION AND CLOSURE OF THE SITE

- 10.1 The Site or any portion thereof, the surface of the site must receive only waste used for capping as mentioned in the Minimum Requirements or any other material approved by the Director and be maintained in such a way that no objects or materials including facilities and old machinery which may hamper the rehabilitation of the Site are present. Rehabilitation and closure of the Site should entail-
- 10.1.1 disposal of the currently generated hazardous waste at an authorised waste disposal sites.
- 10.1.2 development of a strategy for the prevention of illegal dumping upon closure or post closure of the waste facility.
- 10.1.3 management of vegetation in terms of species of vegetation planted adjacent to the fill areas and along property boundaries and implementation of a programme for the prevention and or removal of invasive alien vegetation from the site.
- 10.1.4 protection of the cover from ponding water, drainage challenges, erosion and also providing adequate security to prohibit damage of the cover from settlements.
- 10.1.5 assessment of the long and short term stability.
- 10.1.5.1 significant environmental effects during the aftercare period.
- 10.1.5.2 inspection and maintenance frequencies pertaining to monitoring equipment and abstraction points and results thereof.

11. GENERAL

- 11.1 The construction of the Licenced activity may not commence within thirty (30) days of the date of signature of this Licence.
- 11.2 Should you be notified by the Minister of a suspension of the Licence pending any appeals decision, you may not commence with the activities licensed by the Minister in writing.
- 11.3 After an appeal period has expired and no good cause to extend the appeal period has been submitted, the activity may commence provided a notice has been submitted to the Department. The notice must include a date on which it is anticipated that the activity will commence.
- 11.4 The activity must commence within a period of two (2) years from the date of issue if commencement of the activity does not occur within that period, the Licence lapses and a new application for a licence must be made in order for the activity to be undertaken.



- 11.5 If the Licence Holder anticipates that commencement of the activity would not occur within two (2) year period, he/ she must apply and show good cause for an extension of the licence six (6) months prior to its expiry date.
- 11.6 This Licence shall not be transferable unless such transfer is subject to condition 13.1.
- 11.7 This Licence shall not be construed as exempting the Licence 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.
- 11.8 Transgression of any condition of this Licence could result in the validity of the licence being terminated by the Department.
- 11.9 Non-compliance with a condition of this Licence may result in criminal prosecution or other actions provided for in Section 67 (1) of the National Environmental Management: Waste Act, 2008.
- 11.10 Any committees appointed in terms of the application or any other public authority or organisation shall not be held responsible for any damages or losses suffered by the Licence Holder or hi/her successor in title in any instance where construction are to be temporarily or permanently stopped for reasons of non-compliance.
- 11.11 In terms of section 28 and 30 of the National Environmental Management Act No. 107 of 1998, and section 19 and 20 of the National Water Act No.36 of 1998, any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the licence holder reads through and understand the legislative requirements pertaining to the project. It is the Applicant's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmental acceptable manner.

12 APPEAL OF LICENCE

- 12.1 The Licence Holder must notify every registered interested and affected party, in writing and within ten (10) days, of receiving the Department's decision.
- 12.2 The notification referred to in 15.1. must –
- 12.2.1 Specify the date on which the licence was issued;
- 12.2.2 Inform the registered interested and affected party of the appeal procedure provided for in Chapter 7 of the GN No. R 385 of 26 April 2006 in terms of National Environmental Management Act, 1998, as amended (see Annexure 1).
- 12.2.3 Advise the interested and affected party that a copy of a Licence and reasons for the decision will be furnished on request.



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- 12.2.4 An appeal against the decision must be lodged in terms of chapter 7 of the GN No. R 385 of 26 April 2006 in terms of NEMA 1998, as amended, from the date of this license, with: The Minister, Department of Environmental Affairs, Private Bag X 447, PRETORIA, 0001, Tel No.: (012) 310 3705, Fax No.: (012) 320 7561.

Mr Sonnyboy Bapela
ACTING DEPUTY DIRECTOR-GENERAL

DATE: 2010-11-29



ANNEXURE I

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF R. 385 OF 2006 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF A WASTE MANAGEMENT LICENCE

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive a notification of a Waste Management Licence from the relevant Competent Authority	1. Receive a notification of a Waste Management Licence from Applicant/Consultant
2. Within 10 days of receipt of notification, notify the relevant Competent Authority and all IAPs of intention to appeal	2. Within 10 days of receipt of notification, notify the relevant Competent Authority of intention to appeal
3. Notification served by the Applicant must include: 3.1. A copy of the notice of intention to appeal; and 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by all IAPs	3. Appellant must serve on the Applicant 3.1. A copy of the notice of intention to appeal 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by the applicant
4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal	4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal
5. A person or organ of state that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of state within 30 days from the date that the appeal submission was made available for inspection by the appellant	5. An Applicant that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of State within 30 days from the date the appeal submission was made available for inspection by the appellant

NOTES:

1. An appeal against a decision must be lodged with:-

- a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
- b) the delegated organ of state where relevant.

2. An appeal lodged with:-

- a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs by means of one of the following methods:
By facsimile: (012) 320 7561
By post: Private Bag X447, Pretoria, 0001; or



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By hand.

2nd Floor, Fedsure Forum Building, North Tower, cnr.
Pretorius and van der Walt Streets, Pretoria.

- b) the delegated organ of state, where relevant, must be submitted to the delegated organ of state.

3. An appeal must be:-

- a) on an official form obtainable or published by the relevant department;
- b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal and is not available to the relevant Competent Authority;
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62;
 - the prescribed appeal fee, if any.

4. A copy of the official appeal form can be obtained from:

Mr TH Zwane
Senior Legal Administration (Appeals)
Tel: 012 310 3929
tzwane@environment.gov.za; or

Ms MM Serite
Legal Administration Officer (Appeals)
Tel: 012 310 3788
mserite@environment.gov.za



ANNEXURE II

**WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING
AND INVESTIGATIVE MONITORING: CONDITIONS 5.2, 5.3 and 5.4**

Alkalinity (P.Alk)
Calcium (Ca)
Chromium (hexavalent) (Cr^{6+})
Chromium (Total) (Cr)
Chemical oxygen demand (COD)
Cyanide (CN)
Mercury (Hg)
Lead (Pb)
Nitrate (as N) ($\text{NO}_3\text{-N}$)
Phenolic compounds (Phen)
Potassium (K)
Total dissolved solids (TDS)
Phenolic compounds (Phen)
Total organic Carbon (TOC)
Total organic halogen (TOX)
Volatile organic compounds

Free & saline ammonia as N ($\text{NH}_4\text{-N}$)
Boron (B)
Magnesium (Mg)
Cadmium (Cd)
Chloride (Cl)
Fluoride (F)
pH
Sodium (Na)
Electrical conductivity (EC)
Sulphate (SO_4)



ANNEXURE III

**WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING AND
DETECTION MONITORING: CONDITIONS 5.3 AND 5.4**

(a) Bi-annually for:

Alkalinity (P. Alk)
Chemical oxygen demand (COD)
pH
Total dissolved solids (TDS)
Chlorides (Cl)
Nitrate (NO₃-N)
Potassium (K)

b (i) Annually for:

Electrical conductivity (EC)
Calcium (Ca)
Magnesium (Mg)
Sodium (Na)
Sulphate (SO₄)
Fluoride (F)

b (ii) Electrical conductivity (EC)
Calcium (Ca)
Magnesium (Mg)
Sodium (Na)
Sulphate (SO₄)
Fluoride (F)
Total Organic Compounds (TOC)
Total Organic Halogen (TOX)



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ANNEXURE IV

INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS: CONDITION 7.1

* = Indicate with an X. Please print legibly.

NAME OF SITE:	<input type="text"/>	DATE OF REPORT:	<input type="text"/>
<input type="text"/>			
LOCATION:			
LIST OF ENVIRONMENTALLY SENSITIVE AREAS IN THE VICINITY:			
1. <input type="text"/>			
2. <input type="text"/>			
3. <input type="text"/>			

1. Registered owner(s) of property on which Licensed facility &/ site is situated:

Name	Telephone	<input type="text"/>
Postal Address	Fax	<input type="text"/>
	Email	<input type="text"/>

2. Operator in control of disposal Site:

Name	Telephone	<input type="text"/>
Identity number	Tel. After hours	<input type="text"/>
Educational Qualifications	<input type="text"/>	
Other Relevant competencies:	<input type="text"/>	

3. Water monitoring:

Attach results, trends and graphs and interpretation and action plans where required

4. Indicate the present dimensions of the Site(metre)

Height/depth	<input type="text"/>
Length	<input type="text"/>
Breadth	<input type="text"/>

5. Incident and complaints management:

Attach the incidents and complaints and corrective and preventative action report

I, the undersigned, declare that the information stated above and the Risk Assessment below is to my knowledge a true reflection of the status at the _____ disposal site.

Signature: _____

Name: _____



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Capacity: _____

Place: _____

Date: _____

Local human population	Airborne dusts /particulates	Nuisance - dust on cars, clothing etc	Deposition from air						
Local human population	Noise from machine	Nuisance loss of amenity, loss of sleep	Air transport						
Local human population	Fugitive releases, waste, litter and mud on roads	Nuisance loss of amenity	Vehicles entering and leaving the Site. Waste escaping the Site						
Local human population	Odour	Nuisance loss of amenity.	Air transport						
Local human population	Scavenging birds and animals	Nuisance loss of amenity.	Air transport and over land						
	Pests (e.g flies)	Nuisance loss of amenity	Air transport and over land						
Local human population	Flooding of Site	If waste is washed off Site it may cause contamination	Flood waters						
Groundwater and surface waters	Fire on Site leading to run-off from polluted fire fighting waters	Contaminating of groundwater and aquatic ecosystems	Direct and indirect run-off						
Local human population and/or livestock	All non-Site hazards-particularly	People/livestock coming into contact	Direct physical contact						

gaining unauthorised access to the activities	relating to waste handling & storage site	with hazards							
		Arson and/or vandalism causing the release of polluting materials	Arson-air Liquids polluting watercourses and/or groundwater						
Ground water	Contaminated run-off from waste	Contaminating of ground water	Soil to ground water to borehole.						
Local human population	Smoke from burning of waste in case of fire	Nuisance, loss of amenity, loss of sleep. Respiratory irritation/illness	Air transport						

EXPAND TABLE AS PER YOUR RISKS



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Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

H:H - Decommissioning of the H:H cell Tubatse chrome

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ANNEXURE V

FORM TO BE USED FOR CHEMICAL INFORMATION: CONDITIONS 7.2

Name of site			
Address of site			
Sample ID		Sample ID	
Time of day	h min	Date of sample	m
Name of analyst			

General chemistry

pH	(-log[H ⁺])			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 ₃ /l)			Mn	(mg/l)		
Cl	(mg/l)			Pb	(mg/l)		
SO ₄	(mg/l)			Hg	(mg/l)		
NO ₃ -N	(mg/l)			S-	(mg/l)		
F	(mg/l)						
COD	(mg/l)						
NH ₄ -N	(mg/l)						
Phenol	(mg/l)						
PO ₄	(mg/l)						
TOX	µg/l						
TOC	(mg/l)						
Ba	(mg/l)						