SECTION G - RESOURCES USE & ENERGY EFFICIENCY

Sub-Section	Title	Location of Information
G.1	Supplementary Information: Raw Materials, Substances, Preparations, and Energy	WLA p.30 and Attachment G.1 EIS Vol. 1, Section 2.0
G.2	Energy Efficiency	WLA p.30 and Attachment G.2 EIS Vol. 1, Section 2.0

Consent for inspection purposes only any other use.



G.1 RAW MATERIALS, SUBSTANCES, PREPARATIONS AND ENERGY

G.1.1 Diesel

All plant used in the process will be mechanically driven. The daily diesel consumption of the proposed Facility equipment will be approximately 1,750 litres. Fuel for plant will be stored on-site in two 5,000 litre tanks. Diesel consumption per annum will be ca. 530,000 litres.

G.1.2 Oil

All plant will need oil during regular servicing. Approximately 2,500 to 3,000 litres of engine oil and lubrication oil will be used on an annual basis. This will be disposed of by the contractors carrying out servicing on plant or by an appropriately licensed contractor.

G.1.2 Electricity

Electricity consumption is estimated to be 78.55 kWatts. Table G.1.1 below summarises areas of consumption. This is based on loadings from similar Facilities. The actually figure may be slightly higher or lower than stated. It is proposed to connect to the ESB grid for electricity.

Quantity	Load Reference	Voltage	Load per Unit	Total Load
2	Weighing Machine	400V	4.0kWatts	8.0kWatts
4	Motorised Gates	400V	3.0kWatts	12.0kWatts
-	Offices Lighting	400V	3.0kWatts	3.0kWatts
-	Offices Gen. Services	400V	5.0kWatts	5.0kWatts
-	Offices Small Power	400V	4.0kWatts	4.0kWatts
1	Kiosks Services	400V	5.0kWatts	5.0kWatts
27	Roadway Lanterns	230V	250 Watts	6.75kWatts
3	High mast Lanterns	230V	1,600 Watts	4.8kWatts
-	Canteen	400V	30.0kWatts	30.0kWatts
Total Load				78.55kWatts

Table G.1.1 Electricity Consumption For Process

G.1.3 Water

There will be a number of demands for water at the facility. They are as follows:

1. Drinking Water and water for the canteen, toilets etc. - ca. 90 l/employee/day;

- 2. Crusher / Screener dust suppression ca. 500 l/day;
- 3. Misting Systems on the Site Perimeter for dust suppression weather dependent;
- 4. Wheel wash periodic top up and hardstands weather dependent;

5. Damping down roads and hardstands - Weather dependent; and

6. Power sprinklers for dust suppression – weather dependent.

Public mains water will be used for demands 1 to 2. Alternative sustainable water sources such as surface water collected on site, a groundwater well into bedrock upgradient of the waste lagoons and locally abstracted water from Lough Mahon will be considered and used as appropriate for demands 3 to 6.

G.1.4 Vermin Control

Vermin controls will be deployed at the facility as a precautionary measure with the main area of concern beings rodents such as rats. The quantities of vermin control that would be required are 20 x Bromatrol rat blocks and 40 grams of Difernard. It is proposed to visit the Facility on eight occasions annually to check on abatement. The number of visits would increase or decrease depending on the problem. A preliminary plan is enclosed.

G.1.5 Product

Waste accepted will consist of C,D&E waste namely concrete, bricks, tiles and ceramics, soil and stone. Some of the loads accepted will also contain residual amounts of metal, wood and plastic etc. These components will be separated out and sent to an appropriate Facility for further processing. It is important to note that foads consisting primarily of these products will be turned away from the Facility of the final processed product will conform to engineering standards for capping and restoration of the waste lagoons and other areas. A maximum of 300,000 tonnes of C,D&E materials will be accepted per annum over a 10 year period with an estimated 1,200,000 to 1,400,000 tonnes needed to cap and restore the Site.



PEST CONTROL SERVICE CONTRACT C, D & E Facility AL Consent for inspection purposes only any

Rentokil Initial

Rentokil Pest Control Ballysimon Road Co. Limerick

16th May 2008

Our Ref:EF/EF

Mr David Killeen C,D & E Facility Littleisland Co cork

15th May 2008

Dear Mr Killeen

Further to my recent survey of your premises, I would now like to submit my recommendations, quotation etc. I would strongly recommend our S.R.S. (Special Reporting Service) which has HACCP compliance incorporated and is ideally suited to your requirements.

Our S.R.S. reporting system incorporates the following;

- 1) Detailed report on each visit outlining;
- a) Work carried out
- b) Quantity of rodenticide used
- c) Date and number of visits
- d) Degree of infestation found.
- ton purpose only any other use. e) Each report is signed ideally by the Decision Maker in each location and by FOI the Rentokil Technician.
- 2) An advice sheet outlining potential problems e.g. proofing, stacking, housekeeping etc and any other items which may encourage rodents to enter and remain undetected in the building.
- 3) A list of all Rentokil pesticides giving their commercial name, percentage of active ingredient and registration number.
- 4) A check list outlining location of all baits on your premises.
- 5) Details of contract e.g. pests covered and areas covered.
- 6) Contact names and telephone numbers of relevant Rentokil staff.
- 7) You provide a site map of your premises and we will mark the location of all Rentokil baits on same.
- 8) The agreement offered is for a minimum of eight visits per annum and any call outs as necessary at no additional cost.

This system is in compliance with ISO 9002.

I am enclosing by post a copy of our Insurance certificate, Tax clearance certificate, Employers liability, Public/Products liability, Rentokil Pest Control HACCP policy for the food industry, our Health & Safety statement and our Environmental Policy statement.

All the rodenticides we propose to use are manufactured **by us** to stringent standards and are available to no other pest control company, this ensures that the product is covered right from manufacture to use by our insurance policy, this is totally in contrast with other pest control companies who use "off the shelf" preparations that are not manufactured by themselves. Within your premises our intention is to use a lard base non spill rodenticide, which adheres to the inside of the bait box, this reduces considerably the likelihood of product contamination. Safety Data sheets will be available for every preparation that we use. With the use of the aforementioned baiting system it is possible at any given time to give an accurate measurement of the amount of bait used in each premises. All baits etc. would be listed on a site map using the internationally recognised colour codes i.e. Red – Toxic Rodent Baits, Blue – Electronic Fly Killers, Black – Insect Detectors, Green – Non Toxic Rodent Detectors and Yellow – Moth Phermone Lures.

Protection of baits is vital to prevent spillage, contamination of goods, deliberate misuse or ingestion by children and non-target animals. To this end we stock a range of tamper resistant bait boxes designed to contain and protect bait safely whilst still enabling Rats and Mice to enter and feed freely.

In some situations, failure to use tamper registant bait boxes might be viewed as negligent, especially in locations accessible to children, pets, domestic animals or wildlife.

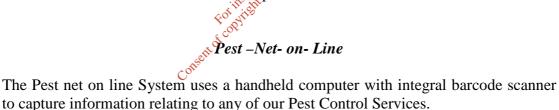
Our tamper resistant external heavy duty metal bait boxes have the following features;

- Protection of bait from the weather.
- Strength and rigidity to resist entry by large non target species.
- Ease of access for rodents, usually via a passageway that allow rodents to see an exit point as they enter.
- Ease of access for inspection purposes.
- Lid which is secured against unauthorised entry.
- The area containing the bait is protected from unwanted access by means of inbuilt baffles.
- Can be attached to the ground, to a fence etc. to prevent tampering/removal etc.
- Bait box entrance size is designed to permit rodent's entry, but access to same is excluded by children birds, dogs, cats and other wildlife. Small metal lips under the entrances prevent spillage.
- Warning labels indicating the use of rodenticide are affixed.

As these features help prevent unauthorised access to the <u>bait and reduce the</u> <u>likelihood of children and non-target animals accessing rodenticide</u>, they are thus suitable for use in environmentally sensitive situations. Users can be satisfied that the bait is secure as possible. Bait stations are also reusable and can be relocated easily in response to changes in rodent infestation patterns, premises layout or change in customer needs. **Indoors** we propose to use tamper resistant mouse bait box, which are rigid white plastic boxes with a hinged lid. These boxes are opened by a special plastic key. Mice actually prefer to feed under shelter. Studies have shown that bait take can be increased by using bait boxes as opposed to open trays of rodenticide. Boxes will be labelled with either red lettering (indicating it contains rodenticide) or green lettering (indicating it contains non-toxic monitoring bait)

We would set up an S.R.S site map depicting the areas covered by the agreement and record the position of rodenticidal baits, electronic fly killing units etc. The numbers and locations of bait points are noted on a Check List. Routine visits, inspections and call outs are recorded, infestation found and adverse conditions likely to increase the risk of pest infestation are noted, by department or area. At the end of every visit a report is made on an Action Form. This report records evidence of pests found and preparation used. Recommendations for improving, for example, housekeeping, stacking and proofing are made on the Action Form. The contents of both these reports are normally discussed with you. With the exception of infestation indicated at external bait points, whenever rat or mouse re-infestation occurs, the Technician takes special steps to ensure its elimination as quickly as possible and normally makes follow-up calls until the infestation is cleared. When infestation is indicated at external bait points the Technician ensures that adequate bait is present and arranges to follow-up as necessary. Requests for call out treatments will, under all normal

Incidentally the date of work carried out will be noted within each box, this ensures that all bait points are inspected on each and every routine visit. P.V.C. bait station numbers would be used to indicate each permanent bait station.



Once collected the data is uploaded to a secure web site where it can be viewed by **C**, **D** & **E** Facility and our own staff using a standard Internet connection and browser providing identification procedures have been validated.

By operating this way it is possible to disperse with excessive paperwork/record and convert all information into digital format it also allows the user to query the data wherever they happen to be, instead of accessing files from an office.

When carrying out an inspection, Technicians download via the Internet from the secure web site on their handheld computers, precise information on the site and the location of pest control detectors on **C**, **D** & **E** Facility. They are able to check each detector in turn and input information regarding the nature of any pest activity found.

Within minutes the data recorded can be interfragated by C, D & E Facility. Pest net on line is the prefect illustration of Rentokil Pest Control Services and with our dedication and commitment to providing a paperless, records system and the ereporting service is continually upgraded and developed in line with our customers requirements.

Pest net on line can place greater control in your hands downloading all relevant information of Services, Field Biologist Reports, Material Safety Data Sheets, Insurance Policies etc on line.

Some Key Features of Pest-Net-on-Line Service

- ✤ A simple, transparent, on line reporting system that saves time and gives total peace of mind.
- Electronic, interactive site plans (any detector showing pest activity on last visit will flash).
- Trends analysis of pest activity.
- Clear, concise, easily understood formats that allows you to track pest activity over time.
- Pest Prevention Recommendations.
- Simple traffic lights status that enables a more efficient review of outstanding actions, fully interactive sign of procedures of
- ✤ Material Safety Data Sheets and details of preparations used on site.
- Latest versions of all our products Safety Data Sheets are available to download leaving you secure in the knowledge that you always have access to the most up to date information.
- Document download facility.
- Ensure all documents pertaining to your site are readily accessible and up to date.
- Feedback link for direct contact to Rentokil Pest Control for a prompt online response to all your queries.
- Link one user to multiple sites, or multiple users on one site.
- Total remote management pest control, access across al your sites from anywhere in the world, 24 hours a day, 365 days a year
- Extensive filtering options (allowing areas of concern to be rapidly targeted and productive responses to be generated faster).
- Exact inspection times of all areas (for total transparency of your Pest Control Contract and servicing for added peace of mind).



PEST CONTROL SCHEDULE

8 SERVICE TECHNICIAN TREATMENTS

RATS

MICE

SECURED BAIT POINTS THROUGHOUT

STAFF TRAINING AS REQUIRED

A 24 -HOUR EMERGENCY NUMBER IS AVAILABLE ON 061-412588



SRS Specification/Pest-net-on-line

THE PROVISION OF SERVICE AS DETAILED

The cost to provide the aforementioned specification would be € 450 per quarter plus vat which would include 10 x powder coated heavy duty metal tamper resistant bait boxes on hire at strategic locations throughout surrounds which act as a first line of defence against rodent infestation ther

aly any Hope the above is to your satisfaction, should you have any further queries please do Consent of convingition per rec not hesitate to contact me at either 061-412588 or 087-2328561. My e-mail address is pcsales@rentokil.ie.

Yours Sincerely For Rentokil Pest Control

John Fitzgerald **Sales Manager**

PestNetOnlin@

Placing greater control in your hands



The PestNetOnlin@ system uses a hand held computer with an integral barcode scanner to capture information relating to any of our pest control services. Once collected, the data is immediately uploaded to our secure website where it can be viewed by users using a standard internet connection and web browser; providing identification procedures have been validated.

By operating in this way we can dispense with paper records and convert all information into a digital form. It allows the user to query data wherever they happen to be, rather than simply accessing files from an office.

When carrying out an inspection, Technicians download, via the Internet from our secure website to their hand held computers, precise information on the site and the location of pest control detectors in use. They are then able to check each detector in turn and input information regarding the nature of any pest activity found. Within minutes the data recorded can be interrogated on the website.

PestNetOnlin@ is the perfect illustration of our dedication and commitment to providing a paperless record system. This e-reporting service is continually upgraded and developed in line with our customers' requirements.

PestNetOnlin@

How does it work?

- During the initial installation of PestNetOnline, all pest control detectors throughout the site are fitted with a barcode. Information about the location of each detector is then entered into a handheld computer. All details of pest activity and pest prevention recommendations are also entered.
- When this is completed, all data is sent from the computer to a secure server at Rentokil Pest Control head office, using an infrared link between the computer and a mobile phone. This method of transmission ensures that the data is transferred within minutes of the treatment being completed.
- Before our Field Biologist of Service Technician leaves your site, the data is available to view on our secure website. We will then discuss our full inspection findings with you in the normal way.
- You will be assigned a unique username and password in order to gain access to our secure website and view your pest control records. You can be safe in the knowledge that due to this method of accessing the website, only individuals authorised by you can vie
- At the end of every treatment, when the data has been successfully sent, an email is automatically generated and sent to you. This e-mail informs you that a treatment has been carried out, and includes a brief summary of pest activity and recommendations made.



Some Key Features of the PestNetOnlin@ervice

"A simple, transparent, online reporting system, that saves time and gives total peace of mind"

• Electronic, interactive site plans

Any detector showing pest activity on the last visit will flash.

• Trend analysis of pest activity

Clear, concise, easily understood formats that allow you to track pest activity over time.

Pest prevention recommendations

Simple traffic-light status to enable a more efficient review of outstanding actions. Fully interactive sign-off procedure.

• Material safety data sheets and details of preparations used

Latest versions of all our product safety data sheets are available to download leaving you secure in the knowledge that you always have access to the most up to date information. View full details of all preparations used on your site.

Document download facility

Ensures all documents pertaining to your site are readily accessible and up to date.

• Feedback link for direct contact to Rentokil Pest Control

For a prompt online response to all your queries.

• Link one user to multiple sites, or multiple users to one site

Total remote management pest control, across all your sites, from anywhere in the world, 24 hours a day, 365 days a year.

• Extensive filtering options

Allowing areas of concern to be rapidly targeted and proactive responses to be generated faster.

• Exact inspection times of all areas

For total transparency of your pest control contract and servicing for added peace

of mind.

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Killeen, David

Elaine Forde [elaine.forde@rentokil.ie] From: 20 May 2008 11:47 Sent: Killeen, David To: Subject: RE: C D & E Facility 16.05.08

Hi David

The quantities used would be 20 x Bromatrol rat blocks and 40 grms of Difernard

Regards John Fitzgerald

----Original Message-----From: Killeen, David [mailto:David_Killeen@golder.com] Sent: 20 May 2008 10:12 To: elaine.forde@rentokil.ie Subject: RE: C D & E Faciltiy 16.05.08

Hi Elaine

What quantities of abatement will be used on site. I know that this may be difficult to predict. A best case scenario amount for the eight visits per year set out would be sufficient. The EPA require these details.

```
-----Original Message-----
From: Elaine Forde [mailto:elaine.forde@rentoks[lof.anyone
Sent: 19 May 2008 15:55
To: Killeen, David
Subject: RE: C D & E Facilt'
                                                                                      ronnsection purposition
```

----Original Message-----From: Killeen, David [mailto:David Killeen@golder.com] Sent: 19 May 2008 13:50 To: elaine.forde@rentokil.ie Subject: RE: C D & E Faciltiy 16.05.08

Hello

Thank you for forwarding on the quotation. We would also need to know the type quantity and MSDS information for materials used on site. Would it be possible to forward on this information.

Regards

----Original Message-----From: Elaine Forde [mailto:elaine.forde@rentokil.ie] Sent: 16 May 2008 16:52 To: Killeen, David Subject: C D & E Faciltiy 16.05.08

Dear mr Killeen

Please find attached quotation for Pest Control Services

Regards John Fitzgerald

This email has been scanned by the MessageLabs Email Security System for any possible threats. If you have received this e-mail in error, please accept our apologies and we simply request that you delete this document or e-mail it to it@rentokil-initial.ie This email has been scanned by the MessageLabs Email Security System for any possible threats. If you have received this e-mail in error, please accept our apologies and we simply request that you delete this document or e-mail it to it@rentokil-initial.ie This email has been scanned by the MessageLabs Email Security System for any possible threats. If you have received this e-mail in error, please accept our apologies and we simply request that you delete this document or egmail it to it@rentokil-initial.ie ther This email has been scanned by the Message Labs Email Security System for any OWN possible threats. If you have received this e-mail in critic, please accept our apologies and we simply request that you delete this document or e-mail it to it@rentokil-initial.ie This email has been scanned by the MessageLabs Email Security System for any possible threats. If you have received this e-mail in error, please accept our apologies and we simply request that you delete this document or e-mail it to it@rentokil-initial.ie



Pest Control

DATE :01:07:2004

Safety Data Sheet NOTE: Access to a copy of this Safety Data Sheet (SDS) via our Website does not constitute the issue of a controlled Copy under EU legislation. To be issued with such a copy please contact Rentokil Initial at the address below by telephone, fax or in writing. In order to confirm the latest version of the SDS for this product see web: www.ri-research.com and click on Technical Information / Product Safety.

REVISION (see box 16)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY		
PRODUCT NAME	BROMATROL RAT BLOCKS (with Bitrex™)	
DESCRIPTION	A blue, rodenticidal, ready-to-use grain-based bait block with no perceptible odour. For professional use in the control of rats. Contains a bittering additive.	
COMPANY	Rentokil Initial UK Ltd, Pest Control, Felcourt, East Grinstead, West Sussex. RH19 2JY. United Kingdom. Telephone: +44 (0)1342 833022 Facsimile: +44 (0)1342 326229	

2	HAZARD IDENTIFICATION
CLAS	SIFICATION AND DANGER SYMBOL (SUPPLY – USE) : IN COMPLIANCE WITH EC DIRECTIVE 1999/45.
	Not classified
ADVE	RSE PHYSICAL, CHEMICAL, SIGNIFICANT HUMAN HEALTH AND ENVIRONMENTAL EFFECTS (SEE ALSO BOX 11):
Comb	ustion or thermal decomposition may evolve toxic or irritant vapours.
This pr	roduct contains an anticoagulant compound of sufficient quantities are ingested, nose-bleed and bleeding gums may occur. In a cases there may be bruising, haematomas of the joints and blood present in the urine and faeces.

Adverse effects on the environment are unlikely, provided that the product is used as intended.

% w/w	COMMON*/CHEMICAL NAME, ELINCS/EINECS AND CAS OF INGREDIENTS Bromadiolone* / 3-[3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4- hydroxycoumarin. EINECS : 249-205-9 CAS : 28772-56-7		EC 1999/45 CLASSIFICATION T+ : R27/28 N : R51/53	
0.005				
≤1.0	Bitrex™* / denatonium benzoate	EINECS : 223-095-2 CAS : 3734-33-6	X _n : R20/22 X _i : R38 X _i : R41 : R52,53	
> 2.5 ≤ 10.0	Propylene glycol* / propane-1,2-diol	EINECS : 200-338-0 CAS : 57-55-6	Not classified.	

BROMATROL RAT BLOCKS - (with Bitrex[™]) Issue:03 01:07:2004

SDS No. 727

Page 1 of 4

4 FIRST-AID M	EASURES (SEE ALSO "ADVERSE EFFECTS" IN BOX 2)
INHALATION	Unlikely route of exposure. However, remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention.
EYE CONTACT	Rinse affected eye with clean running water, or eyewash solution, for at least 15 minutes holding eyelids well apart. Rinse entire surface and do not allow run-off to contaminate unaffected eye. Seek medical attention.
SKIN CONTACT	Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice.
INGESTION (SWALLOWING)	Do NOT induce vomiting. If unconscious place in the recovery position and apply supportive measures if necessary. If conscious give patient up to ½ litre or 1 pint of water to drink. Seek medical attention.
EMERGENCY EQUIPMENT SUGGESTED	Appropriate first-aid equipment should be provided. For the UK this should be in accordance with the Health & Safety (First-Aid) Regulations 1981. See also the Approved Code of Practice "First-aid at Work".
NOTE TO DOCTOR	Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK. Telephone +44 (0) 870 600 6266 - 24 hours.

5 FIRE FIGHTIN	IG MEASURES
FIRE EXTINGUISHER TYPE	Use foam, water, carbon dioxide or dry powder extinguishers.
SPECIAL FIRE-FIGHTING PROCEDURES	Wear self-contained breathing apparatus and suitable protective clothing.
SPECIAL EXPOSURE HAZARDS	Combustion or thermal decomposition may evolve toxic or irritant vapours.
-	

6 ACCIDENTAL	RELEASE MEASURES
PERSONAL PRECAUTIONS (See also box 8)	Wear suitable personal protective equipment.
ENVIRONMENTAL PRECAUTIONS	DO NOT contaminate watercourses or ground.
CLEAN-UP PROCEDURE (See also box 13)	Brush up spillage and transfer to a suitable container for subsequent disposal.

7	7 HANDLING AND STORAGE	
HAND	DLING	Avoid all contact by mo

HANDLING	Avoid all contact by mouth.
	Wash hands and exposed skin before meals and after use.
STORAGE	Store in original container in a coop dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuffs.
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8 EXPOSURE C	CONTROLS/PERSONAL PROTECTION (SEE ALSO BOX 7)
EXPOSURE STANDARD - DIRECTIVE EC/98/24 (1 ST IOELV DIRECTIVE)	OES for propylene glycol for total (vapour and particulates) is 474 mg/m ³ long term exposure (8 hour Time Weighted Average) and for particulates is 10 mg/m ³ long-term exposure (8 hour TWA). Propylene glycol is referred to as propane-1,2-diol in Directive EC/98/24 (1 St IOELV Directive).
ENGINEERING CONTROLS	Where prevention of exposure is not reasonably protective EC/36/24 (1 TOEEV Directive). Where prevention of exposure is not reasonably practicable, adequate control of exposure should be achieved by engineering controls rather than the provision of personal protective equipment and clothing. More specific details cannot be given without carrying out a full risk assessment for each and every use scenario. Suitable and approved personal protective equipment and clothing may include the following item(s):
EYE PROTECTION	None necessary under normal working conditions.
HAND PROTECTION	None necessary under normal working conditions.
SKIN PROTECTION	None necessary under normal working conditions.
BREATHING PROTECTION	None necessary under normal working conditions.
ENVIRONMENTAL EXPOSURE CONTROLS	Product should be used in accordance with instructions given.

APPEARANCE AND ODOUR	A blue, grain-based bait block with no perceptible odour.		
₽H	Not applicable.	SOLUBILITY IN WATER	Insoluble.
BULK DENSITY	1.2-1.3 g/cm ³ at 20°C	SOLUBILITY IN FAT	Insoluble.
FLASH POINT	Not applicable.	EXPLOSIVE PROPERTIES	None known.
FLAMMABILITY	Non-flammable.	COMBUSTIBILITY	Combustible.
	Not applicable.	OXIDISING PROPERTIES	Not determined.
BOILING POINT/RANGE	Not applicable.	MELTING POINT	Decomposes before melting at around 240°C
VAPOUR DENSITY	Not applicable.	EVAPORATION RATE	Not applicable.
VAPOUR PRESSURE	Not applicable.	PARTITION COEFFICIENT	Not applicable.
VISCOSITY	Not applicable.	OTHER DATA	None known.

 BROMATROL RAT BLOCKS - (with Bitrex™)

 Issue : 03
 01 : 07 : 2004

10 STABILITY AND REACTIVITY		
CONDITIONS TO AVOID	Avoid extremes of temperature, e.g. below 0°C and above 40°C.	
MATERIALS TO AVOID	None.	
HAZARDOUS BREAKDOWN PRODUCTS	Combustion or thermal decomposition may evolve toxic or irritant vapours.	
<u></u>		

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Αсυτε Τοχιςιτγ	ORAL	LD ₅₀ (rat) : 6233 to 8014 mg/kg.			
	INHALATION	Unlikely route of exposure.			
	DERMAL	Not determined.			
CORROSIVITY/	SKIN	Product is not expected to be irritating to skin.			
IRRITATION	EYES	Product is not expected to be irritating to eyes.			
	RESPIRATORY TRACT	Product is not expected to be irritating to the respiratory tract.			
SENSITISATION	SKIN	Contains no known skin sensitisers.			
	RESPIRATORY	Contains no known respiratory sensitisers.			
REPEAT-DOSE TOXICITY		Product does not contain any components known to have any effects relating to repeated-dose toxicity.			
MUTAGENICITY		Product does not contain any components known to have a mutagenic effect.			
		Product does not contain any components known to have a carcinogenic effect.			
REPRODUCTIVE FERTILITY		Product does not contain any components known to have effects on fertility.			
Τοχιςιτγ	DEVELOPMENT	Product does not contain any components known to be toxic to the reproductive system.			
OTHER INFORMATION		Bromadiolone is an indirect anticoagulant. Phytomenadione (Vitamin K1) is antidotal. Determine prothrombin times not less than eighteen hours after consumption. If elevated, administer Vitamin K1 until prothrombin time for two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.			

12 ECOLOGICAL INFO	DRMATION		
GENERAL INFORMATION	The full ecotoxicological profile of this product has not been evaluated. Do not contaminate the environment.		
Εςοτοχιςιτγ Data	For bromadiolone: LC_{50} Bluegill sunfish (96h): 3.0 mg/L. LC_{50} Daphnia (48h): 2.0 mg/L. For Bitrex TM : LC_{50} Rainbow trout (96h): 41000 mg/L. EC_{50} Daphnia magna (48h): 13 mg/L.		
MOBILITY	For Bitrex™: water solubility: 45 g/L.		
(of appropriate constituents)	te constituents)		
PERSISTENCE AND DEGRADABILITY (of appropriate constituents)	For Bromadiolone: Very rapid degradation by agents that make water drinkable (chlorine, ozone, chlorine bioxide). Rapid degradation on soil under aerobic conditions: half-life of a few days. High sensitivity to protolysis in aqueous medium: half-life 2.1h at pH 7.3, lower sensitivity to hydrolysis: 67 days at pH 7.		
	For Bitrex™: Abiotic degradation: 10% after 5 days at 50°C at all pHs. Abiotic degradation: 10% after 30 days at 25°C at all pHs.		
BIOACCUMULATIVE POTENTIAL	For Bromadiolone: Fixation on clayey soil.		
(of appropriate constituents)	For Bitrex™: has a low bioaccumulation potential.		
ENVIRONMENTAL	DO NOT contaminate watercourses or ground.		
CONSIDERATIONS	The Bromadiolone in this product is classified as toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The Bitrex [™] in this product is classified as harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Thus, every care must be taken to avoid its release and the subsequent contamination of the aquatic environment.		
OTHER ADVERSE EFFECTS	None.		

13 DISPOSAL CONSIDERATIONS				
DISPOSAL OF WASTE	Under normal circumstances, waste will be disposed of by Rentokil Initial.			
DISPOSAL OF CONTAINERS:	Under normal circumstances, empty containers will be disposed of by Rentokil Initial.			
	Hazard Code: Not classified.			
INGREDIENTS. (Council Directive 91/689/EC,	Components making the waste hazardous Concentrations (%):			
Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	Not required.			
	Disposal should be in accordance with local, State or National requirements. For further advice about disposal, in the UK, contact the local office of the Environment Agency (England and Wales) or Scottish Environment Protection Agency. Local rate from anywhere in the UK: 0845 9333111.			

BROMATROL RAT BLOCKS – (with Bitrex™)

Issue : 03

01 : 07 : 2004

UN No.	Not Classified.	TREMCARD REFERENCE NO.	Not required.		RIS CODE
FRANSPORT CATEGORY	Not required.	UK HAZCHEM EAC	Not required.		PSD65
ADR 2003	CLASS Not required.	ADR HIN	Not required.		LABELS
INTERNATIONAL ROAD)					Not required.
PROPER SHIPPING NAME	Not required.				
IMITED QUANTITY	Not required.				
SPECIAL REQUIREMENTS	Not required.		PACKING GROUP	Not required.	
MDG 2002	CLASS Not required.	IMDG EMS	Not required.		
Sea)			·		
ROPER SHIPPING NAME	Not required.				
IMITED QUANTITY	Not required.				
EXCEPTIONS]				
SPECIAL REQUIREMENTS	Not required.		PACKING GROUP		
NOTE FOR TRANSPORT	Local, State or National	requirements may appl	y to the carriage of this p	roduct.	

HAZARD SYMBOLS	
INDICATION OF DANGER	
	Not required.
RISK PHRASES	Risk phrases are not required.
SAFETY PHRASES Safety phrases are not required.	
LEGISLATION	Labelling is according to UK regulations in plementing the EC Directive 1999/45. Additional labelling requirements may be recessary in accordance with local legislation. Specific legislation used within this Safety Data Sheet is listed in the above boxes.
	For wight

16 OTHER INFORMATION and indication of revisions

The information given on this Safety Data Sheet (SDS) **does not** constitute an assessment in accordance with Control of Substances Hazardous to Health (COSHH) Regulations 2002, in the UK.

Before using any product, ensure that you read and understand its label.

Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times.

Bitrex[™] is a registered trademark of Macfarlan Smith Ltd.

Billex is a registered lide			
REVISIONS	Changes have been made to the content of boxes 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 02.		
RISK PHRASE TEXT (from box 2)	 R27/28 : Very toxic in contact with skin and if swallowed. R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R20/22 : Harmful by inhalation and if swallowed. R38 : Irritating to skin. R41 : Risk of serious damage to eyes. R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 		

BROMATROL RAT BLOCKS – (with Bitrex[™])

Before using any product, ensure that you read and understand its label. The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time	Page 4 of 4
2. Commentation in the control of the control of the control of the detection of the control	
information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is	
with any other material(s) or any other use than that specified herein. Rentokil Initial UK Ltd is not liable for the use of this p	
purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to s	satisfy him/herself as
to the suitability in completeness of such information for his/her own particular use.	

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Safety Data Sheet

NOTE: Access to a copy of this Safety Data Sheet (SDS) via our Website does not constitute the issue of a controlled Copy under EU legislation. To be issued with such a copy please contact Rentokil Initial at the address below by telephone, fax or in writing. In order to confirm the latest version of the SDS for this product see web: <u>www.ri-research.com</u> and click on Technical Information / Product Safety.

REVISION (see box 16)

Issue: 05 01:07:2004

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY				
PRODUCT NAME	DIFENARD 0.005% (with Bitrex™)			
DESCRIPTION	A blue, ready-to-use, rodenticidal paste bait with no perceptible odour and a bittering additive. For use by professional operators in the control of mice.			
COMPANY	Rentokil Initial UK Ltd, Pest Control, Felcourt, East Grinstead, West Sussex. RH19 2JY. United Kingdom. Telephone: +44 (0)1342 833022 Facsimile: +44 (0)1342 326229			

2	
CLA	SIFICATION AND DANGER SYMBOL (SUPPLY – USE) : IN COMPLIANCE WITH EC DIRECTIVE 1999/45.
	Not classified
	iton Purpolitic
AD	RSE PHYSICAL, CHEMICAL, SIGNIFICANT HUMAN HEALTH AND ENVIRONMENTAL EFFECTS (SEE ALSO BOX 11):
No a	verse physical or chemical effects expected.
	roduct contains an anticoagulant compound. If ingested symptoms may include nosebleed and bleeding gums. In severe cases may bruising, haematomas of the joints and blood present in the faeces and urine.
Adv	se effects on the environment are unlikely, provided that the product is used as intended.

% w/w	COMMON*/CHEMICAL NAME, ELINCS/EINE	CS AND CAS OF INGREDIENTS	EC 1999/45 CLASSIFICATION
0.005	Difenacoum* / 3-(3-biphenyl-1,2,3,4-tetrahydro	-1-naphthyl)-4-hydroxycoumarin EINECS : 259-978-4 CAS : 56073-07-5	T+ : R28 T : R48/25 N : R50,53
> 1.0 ≤ 2.5	Propylene glycol* / propane-1,2-diol	EINECS : 200-338-0 CAS : 57-55-6	Not classified.
≤1.0	Bitrex™* / denatonium benzoate	EINECS : 223-095-2 CAS : 3734-33-6	X _n : R20/22 X _i : R38 X _i : R41 : R52,53

4 FIRST-AID MEASURES (SEE ALSO "ADVERSE EFFECTS" IN BOX 2)				
INHALATION	Unlikely route of exposure. However, remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention.			
EYE CONTACT	Rinse affected eye with clean running water, or eyewash solution, for at least 15 minutes holding eyelids well apart. Rinse entire surface and do not allow run-off to contaminate unaffected eye. Seek medical attention.			
SKIN CONTACT	Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice.			
INGESTION (SWALLOWING)	Do NOT induce vomiting. If unconscious place in the recovery position and apply supportive measures if necessary. If conscious give patient up to ½ litre or 1 pint of water to drink. Seek medical attention.			
EMERGENCY EQUIPMENT SUGGESTED	Appropriate first-aid equipment should be provided. For the UK this should be in accordance with the Health & Safety (First-Aid) Regulations 1981. See also the Approved Code of Practice "First-aid at Work".			
Note To Doctor	Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK. Telephone +44 (0) 870 600 6266 - 24 hours.			

5 FIRE FIGHTING MEASURES		
FIRE EXTINGUISHER TYPE	Use foam, water, carbon dioxide or dry powder extinguishers.	
SPECIAL FIRE-FIGHTING PROCEDURES	Wear self-contained breathing apparatus and suitable personal protective equipment.	
SPECIAL EXPOSURE HAZARDS	Combustion or thermal decomposition may evolve toxic and irritant vapours.	
-		

6 ACCIDENTAL	RELEASE MEASURES
PERSONAL PRECAUTIONS (See also box 8)	Wear suitable personal protective equipment.
ENVIRONMENTAL PRECAUTIONS	DO NOT contaminate watercourses or ground.
CLEAN-UP PROCEDURE (See also box 13)	Gather up spilt material and transfer to a suitable container for subsequent disposal.
	St.

HANDLING AND STORAGE

7 HANDLING A	ND STORAGE
HANDLING	Wash hands thoroughly with soap and water after handling.
STORAGE	Store in original container in a cool, dry, wentilated place out of the reach of children and away from food, drink and animal feeding stuffs.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION (SEE ALSO BOX 7)		
EXPOSURE STANDARD - DIRECTIVE EC/98/24 (1 ST IOELV DIRECTIVE)	OES for Propylene glycol for total (vapour and particulates) is 474 mg/m ³ long term exposure (8 hour Time Weighted Average) and for particulates is 10 mg/m ³ long-term exposure (8 hour TWA). Propylene glycol is referred to as propane-1,2-diol in Directive EC/98/24 (1 St IOELV Directive).	
ENGINEERING CONTROLS	Where prevention of exposure is not reasonably practicable, adequate control of exposure should be achieved by engineering controls rather than the provision of personal protective equipment and clothing. More specific details cannot be given without carrying out a full risk assessment for each and every use scenario. Suitable and approved personal protective equipment and clothing may include the following item(s):	
EYE PROTECTION	None necessary under normal working conditions.	
HAND PROTECTION	None necessary under normal working conditions.	
SKIN PROTECTION	None necessary under normal working conditions.	
BREATHING PROTECTION	None necessary under normal working conditions.	
ENVIRONMENTAL EXPOSURE CONTROLS	Product should be used in accordance with instructions given.	

9 PHYSICAL AND CHEMICAL PROPERTIES			
APPEARANCE AND ODOUR	A blue paste with no perceptible odour		
PH	Not applicable.	SOLUBILITY IN WATER	Insoluble.
DENSITY	1.0 g/cm ³ at 20°C	SOLUBILITY IN FAT	Soluble.
FLASH POINT	Not applicable.	EXPLOSIVE PROPERTIES	None known
FLAMMABILITY	Non-flammable.	COMBUSTIBILITY	Combustible.
	Not applicable.	OXIDISING PROPERTIES	Not determined.
BOILING POINT/RANGE	Not applicable.	MELTING POINT/RANGE	45-50°C
VAPOUR DENSITY	Not applicable.	EVAPORATION RATE	Not applicable.
VAPOUR PRESSURE	Not applicable.	PARTITION COEFFICIENT	Not applicable.
VISCOSITY	Not applicable.	OTHER DATA	None known.

10 STABILITY AND REACTIVITY

CONDITIONS TO AVOID	VOID Avoid extremes of temperature, e.g. below 0°C and above 40°C.			
MATERIALS TO AVOID	None known.			
HAZARDOUS BREAKDOWN PRODUCTS	Combustion or thermal decomposition may evolve toxic and irritant vapours.			

ACUTE TOXICITY	ORAL	For Difenard 0.01% (similar product):
		LD ₅₀ (rat) : >2000 mg/kg
	INHALATION	Unlikely route of exposure.
	DERMAL	For Difenard 0.01% (similar product):
		LD ₅₀ (rat) : >2000 mg/kg
CORROSIVITY/	SKIN	For Difenard 0.01% (similar product): non-irritating to rabbit skin.
IRRITATION	EYES	For Difenard 0.01% (similar product): slightly irritating to rabbit eyes.
	RESPIRATORY TRACT	May be slightly irritating to the respiratory tract.
SENSITISATION	SKIN	Contains no known skin sensitisers.
	RESPIRATORY	Contains no known respiratory sensitisers.
REPEAT-DOSE T	OXICITY	Product does not contain any components known to have any effects relating to repeated-dose toxicity.
MUTAGENICITY		Product does not contain any components at concentrations greater than 0.01% known to have a mutagenic effect.
	Y	Product does not contain any components at concentrations greater than 0.01% known to have a carcinogenic effect.
REPRODUCTIVE	FERTILITY	Product does not contain any components known to have effects on fertility.
Τοχιςιτγ	DEVELOPMENT	Product does not contain any components known to be toxic to the reproductive system.
Other Informa ⁻	ΓΙΟΝ	Difenacoum is an indirect anticoagulant. Phytomenadione, Vitamin K1, is antidotal. Determine prothrombin times not less than eighteen hours after consumption. If elevated, administer Vitamin K1 until prothrombin time normalises. Continue determination of prothrombin time for two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.

12 ECOLOGICAL INFO	DRMATION South and			
GENERAL INFORMATION	The full ecotoxicological profile of this product has not been evaluated. Do not contaminate the			
	environment.			
Εςοτοχιςιτή Data	For difenacoum:			
	LC₅₀ (Rainbow trout) (96h) v0.10 mg/L			
	LC ₅₀ (<i>Daphnia</i>) (48h) (0.52 mg/L			
MOBILITY	Not determined. con site			
(of appropriate constituents)				
PERSISTENCE AND	For Bitrex™:			
DEGRADABILITY	Abiotic degradation 10% after 5 days at 50°C at all pHs.			
(of appropriate constituents)				
	Abiotic degradation 10 after 30 days at 25°C at all pHs.			
BIOACCUMULATIVE POTENTIAL	For Bitrex™:			
(of appropriate constituents)	Low bioaccumulation potential.			
ENVIRONMENTAL	DO NOT contaminate watercourses or ground.			
CONSIDERATIONS	The difenacoum in this product is classified as very toxic to aquatic organisms, may cause long- term adverse effects in the aquatic environment. The Bitrex [™] in this product is classified as harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Thus, every care must be taken to avoid its release and the subsequent contamination of the aquatic environment.			
OTHER ADVERSE EFFECTS	None.			

13 DISPOSAL CONSIDERATIONS				
DISPOSAL OF WASTE	Under normal circumstances, waste will be disposed of by Rentokil Initial.			
DISPOSAL OF CONTAINERS:	Under normal circumstances, empty containers will be disposed of by Rentokil Initial.			
CLASSIFICATION OF	Hazard Code: Not classified.			
INGREDIENTS. (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	<u>Components making the waste hazardous</u> <u>Concentrations (%):</u> Not required.			
NOTE FOR DISPOSAL	Disposal should be in accordance with local, State or National requirements. For further advice about disposal, in the UK, contact the local office of the Environment Agency (England and Wales) or Scottish Environment Protection Agency. Local rate from anywhere in the UK: 0845 9333111.			

14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)				
UN No.	Not Classified.	TREMCARD REFERENCE NO.	Not required.	RIS CODE
TRANSPORT CATEGORY	Not required.	UK HAZCHEM EAC	Not required.	PSD62
ADR 2003	CLASS Not required.	ADR HIN	Not required	LABELS
(INTERNATIONAL ROAD)				Not required.
PROPER SHIPPING NAME	Not required.			
LIMITED QUANTITY EXCEPTIONS	Not required.			
SPECIAL REQUIREMENTS	Not required.		PACKING GROUP Not required.	
IMDG 2002 (SEA)	CLASS Not required.	IMDG EMS	Not required.	
PROPER SHIPPING NAME	Not required.			
LIMITED QUANTITY EXCEPTIONS	Not required.			
SPECIAL REQUIREMENTS	Not required.		PACKING GROUP Not required.	
NOTE FOR TRANSPORT	Local, State or Nation	al requirements may	apply to the carriage of this product	

15 REGULATORY INFORMATION (HEALTH AND SAFETY INFORMATION (SEE ALSO BOX 2))				
HAZARD SYMBOLS	Not required.			
INDICATION OF DANGER	Not required.			
RISK PHRASES	Risk phrases are not required.			
SAFETY PHRASES	Safety phrases are not required.			
LEGISLATION	Labelling is according to UK regulations implementing the EC Directive 1999/45.			
Additional labelling requirements may be necessary in accordance with local legislation.				
	Specific legislation used within this Safety Data Sheet is listed in the above boxes.			
	Jose Healton			

16 OTHER INFORMATION and indication of revisions

The information given on this Safety Data Sheet (SDS) **does** not constitute an assessment in accordance with Control of Substances Hazardous to Health (COSHH) Regulations 2002, in the Oliver

Before using any product, ensure that you read and understand its label.

Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times.

Bitrex[™] is a registered trademark of Macfarlan Smith Ltd.

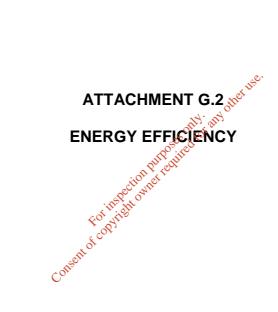
Note: This SDS also supersedes SDS 494.

Note. This Sub also supersedes SUB 434.			
REVISIONS	Changes have been made to the content of boxes 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 04.		
RISK PHRASE TEXT	R20/22 : Harmful by inhalation and if swallowed.		
(from box 3)	R28 : Very toxic if swallowed.		
	R38 : Irritating to skin.		
	R41 : Risk of serious damage to eyes.		
	R48/25 : Toxic: danger of serious damage to health by prolonged exposure if swallowed.		
	R50,53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		
	R52,53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		

DIFENARD 0.005% - (with Bitrex™)

SDS No. 418	Issue : 05	01:07:2004	Page 4 of 4
Before using any product, ensure that you read and understand its label.			
information relates only to	the specific material designated in this safety dat	nowledge and belief, accurate and reliable at the time ta sheet and may not be valid for such material if it is	used in combination
with any other material(s) or any other use than that specified herein. Rentokil Initial UK Ltd is not liable for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.			
Convight @ (2004) Pontokil Initial No. P&D. Ealequitt. Eact Crinestand. West Sussay, PH10.2 IV. United Kingdom			

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G.2 ENERGY EFFICIENCY

G.2.1 Diesel

The annual diesel consumption of the proposed facility equipment is ca. 530,000 litres/annum. All plant operating at the facility will be kept in good working order and serviced regularly to reduce diesel consumption.

G.2.2 Electricity

Lighting of office buildings, yard and processing area will be monitored. Lighting will only be used when required, this will vary seasonally. Some of the lighting in the yard will have to remain on during night time hours for security purposes, however this can be kept to a minimum. All lighting and appliances in the office buildings and canteen will be switched off when not in use to conserve energy.

G.2.3 Water

All piping supplying water to the site will be checked for leakages before back filling, Leaks will be repaired immediately to avoid water wastage. The wheel wash will recycle water and or inspection purpose optication owner required Forinspection purp will be topped up to retain sufficient water .

G.2.4 Energy Audits

Energy audits will be undertaken at the Facility as part of the Environmental Management System for the facility. Reference to the appropriate guidance material and reporting of recommendations of the audit will be included in the Annual Environmental Report which will be a requirement under a Waste Licence issued by the Agency.