# ENVIRONMENTAL RISK ASSESSMENT

The Scrap Yard, Barnfields Industrial Estate, Leek, Staffordshire ST13 5QG

**R Bestwick and Sons Ltd**

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# 1 Introduction

1.1 This Environmental Risk Assessment considers the potential and actual risks associated with the use of the site at The Scrap Yard, Barnfields Industrial Estate, Leek, Staffordshire ST13 5QG.

1.2 The site will be operated by R Bestwick and Sons Ltd in accordance with a fully comprehensive Environmental Management System (EMS) and Environmental Permit, regulated by the Environment Agency (EA).

1.3 All environmental risks identified in this document should be acted upon accordingly by site management to ensure all environmental risks can be appropriately managed/controlled.

1.4 This document primarily considers environmental risks associated with the site based on the proposed variation of the permit. The variation proposals which are considered to require risk management are as follows:

i) Addition of a Household, Commercial, Industrial (HCI) waste transfer station (WTS) with treatment activity comprising the acceptance, storage and mechanical treatment of HCI wastes.
ii) The throughput of the above activity will be <25,000 tonnes per annum.
iii) The proposed addition of the HCI WTS will take place externally and not inside a building.

1.5 This ERA will also consider the risks associated with existing activities taking place on site which include:

- Vehicle storage, depollution and dismantling [Authorised Treatment Facility (ATF)]
- Metal Recycling

# 2 Site Receptors

2.1 A Sensitive Receptors Plan is shown on Drawing No. BAR-2920-04.

2.2 The site is located at southern most part of the Barnfield Industrial Estate. is not located within an AQMA.

2.3 The nearest residential receptors are approximately 250 metres to the south-west and 350m to the north-east of the site.

2.4 The site also operates in close proximity to the River Churnet which is a designated main river and a deciduous woodland (Priority Habitat); both of which lie to the south of the site.

2.5 The site overlies a principal aquifer and zone 3 of a Groundwater Source Protection Zone.

2.6 The purpose of this risk assessment is to demonstrate the suitable pollution prevention measures proposed at the site are suitable to ensure any off site plluti9on is kept to a minimum with regards to the receptors shown within in this ERA and on Drawing No. BAR/2920/04.

# 3 Environmental Risk Assessment Model

## 3.1 Fundamental considerations

3.1.1 **Source/Hazard:** A property or situation that in particular circumstances could lead to harm.

3.1.2 **Consequences:** The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.

3.1.3 **Risk:** A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

## 3.2 Pathway

3.2.1 Important in the assessment of a particular risk(s) and to inform the subsequent management of the risk(s) is the identification of the pathway(s) through which the risk may affect the identified receptor(s). The following are examples of pathways:

- Air
- Ground
- Water
- Direct contact / exposure

## 3.3 Consequences

3.3.1 The following table highlights the consequences of the hazard(s) identified and the abbreviations for each as used in the Risk Assessment Table in Section 3:

| Abbreviation | Consequences |
|---|---|
| A | MINOR INJURY |
| B | MAJOR INJURY |
| C | DEATH |
| D | AIR POLLUTION |
| E | WATER POLLUTION |
| F | POLLUTION OF LAND |

## 3.4 Effects of consequences

3.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

| Abbreviation | Effect of Consequences | Management Required? |
|---|---|---|
| S | SEVERE | In all cases |
| Mo | MODERATE | In most cases |
| Mi | MILD | Occasionally |
| N | NEGLIGIBLE | No |

*Note: "Management" is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.*

## 3.5 Risk estimation and evaluation (probability/frequency of occurrence of hazard)

3.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

| | **Probability** | **Evaluation** |
|---|---|---|
| 1 | Very likely | Could occur during any working day |
| 2 | Likely | Could occur regularly |
| 3 | Possible | Event possible |
| 4 | Unlikely | Event very unlikely |

## 3.6 Risk assessment outcome (combination of probability & consequence)

3.6.1 The following table shows the resultant risk of an identified hazard or potential situation. This uses the hierarchy of both probability and consequence to assess the level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

| | | **Consequence** | | | |
|---|---|---|---|---|---|
| | | **S** | **Mo** | **Mi** | **N** |
| Probability | 1 | High | High | Medium | Low |
| | 2 | High | Medium | Low | Near-Zero |
| | 3 | Medium | Low | Near-Zero | N/A |
| | 4 | Low | Near-Zero | N/A | N/A |

3.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. removal of hazard, implementation of major infrastructure/structural design measures to contain the risk/hazard and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks to ensure all site staff and users are made fully aware of the risk/hazard, all potential consequences and necessary management and contingency procedures.

3.6.3 Where the risk assessment outcome is medium, the management of the risk should be tackled by management or delegates. If removal of the hazard is not possible,

management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures/procedures.

3.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures/procedures.

3.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

# 4 Risk assessment table

4.1 The following pages contain the site-specific risk assessment for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant or situation.

4.2 The table also contains references to the appropriate section(s) of the site's EMS for additional management procedures.

4.3 As discussed in Section 3.6 above, all situations which identify a risk from Low –High should be incorporated into the staff/visitor training schedule, where appropriate and acted on as required.

*SEE TABLES BELOW*

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| DUST / PARTICULATES | SITE SURFACES (DRY AND WINDY WEATHER)<br><br>TREATMENT OF WASTE BY MECHANICAL PLANT<br><br>LOADING OF WASTE USING MOBILE PLANT<br><br>STORAGE OF 'DUSTY' WASTE INCLUDING PRE AND POST TREATED MATERIAL<br><br>TRACKING OF DUST FROM MOBILE PLANT<br><br>POOR HOUSEKEEPING<br><br>DRY/WARM WEATHER CONDITIONS<br><br>INCREASED STORAGE QUANTITIES OF DUSTY WASTE<br><br>INCREASED WASTE THROUGHPUT | AIR | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>FLORA & FAUNA<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A, B, D, E | MO | 2 | LOW/NEAR ZERO | ALL TIPPING AND SORTING OF WASTE WILL BENEFIT FROM A MANUAL DUST SUPPRESSION SYSTEM<br><br>NO MECHANICAL TREATMENT IN THE WAY OF CRUSHING OR SCRENNING OF SOILS & AGGREGATES IS EXPECTED TO TAKE PLACE AT THE SITE WITHIN THE FRIST 12 MONTHS OF OPERATIONS<br><br>ALL STORAGE OF DUSTY WASTES WILL BE DAMPENED DOWN AND STORED BELOW THE HEIGHT OF BOUNDARY WALLS<br><br>SUITABLE SITE INFRASTRUCTURE TO PREVENT POLLUTION OFF-SITE COMPRISING STEEL SHEETED FENCING, CONCRETE WALLS AND LITTER/DUST NETTING<br><br>ALL DUSTY LOADS SHEETED ON ARRIVAL AND EGRESS FROM THE SITE.<br><br>THE MAJOERTY OF THE SITE BENEFITS FROM AN IMPERMEABLE CONCRETE SURFACE; THERE IS A SMALL PORTION OF HARDSTANDING WHICH WILL BE CONCRETED WITHIN 6 MONTHS OF PERMITTED OPERATIONS COMMENCING<br><br>DROP HEIGHTS WILL BE KEPT TO A MINIMUM<br><br>CONTINUOUS MONITORING REGIME IN PLACE TO IDENTIFY ANY POTENTIAL DUST LEAVING THE SITE BOUNDARY.<br><br>COMPLAINTS PROCEDURE IN EMS IN PLACE.<br><br>CLEANING OF ANY SPILLAGES USING WET CLEANING METHODS.<br><br>DURING TIMES OF WINDY, DRY AND HOT WEATHER, THE SITE WILL AVOID AND TIPPING AND SORTING OF ANY POTETNIALLY DUSTY WASTE WITH<br><br>ALL OTHER DUSTY WASTES WILL BE STORED WITHIN THE HEIGHT OF THEIR STORAGE BAY OR STORAGE CONTAINER AND BELOW THE HEIGHT OF THE PERIMETER INFRASTRUCTURE<br><br>DETAILED DUST MANAGEMENT PLAN IN PLACE |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| ODOUR | STORED WASTES<br><br>POOR HOUSEKEEPING<br><br>REJECTED WASTE<br><br>INCREASED STORAGE QUANTITIES OF DUSTY WASTE<br><br>CRACKS IN CONCERTE CAUSING SMALL PARTICLES OF WASTE TO BECOME STAGNANT WITH RAINWATER | AIR | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES | A, D | MI TO MO | 3 | LOW | STRICT WASTE ACCEPTANCE PROCEDURES TO IDENTIFY ODOROUS WASTE LIKELY TO GIVE RISE TO COMPLAINTS OFF-SITE I.E. PUTRESCIBLE WASTES<br><br>STRICT TURNAROUND OF WASTE INCLUDING LOW VOLUMES AND STORAGE DURATIONS<br><br>ANY WASTES GIVING RISE TO ODOUR FOLLOWING A DAILY INSPECTION WILL BE REMOVED FROM SITE WITHIN 48 HOURS<br><br>THE SITE WILL NOT ACCEPT GREEN WASTE IN SEPARATE LOADS & ANY GREEN WASTE FOUND IN A WASTE DELIVERY WILL BE SORTED AND STORED IN A SEALED SKIP<br><br>DRAINAGE CHANNELS AND SITE INFRASTRUCTURE WILL BE CHECKED DAILY WITH ANY ISSUES RECTIFIED AS SOON AS PRACTICABLE<br><br>THERE WILL BE A SEALED REJECTED WASTE SKIP ON SITE FOR CONTAINMENT OF ANY ODOROUS WASTE WHICH IS DISCOVERED BY OPERAITONAL STAFF; THE SKIP CAN ALSO BE COVERED IF NECESSARY AND WILL BE REMOVED FROM SITE WITHIN 48 HOURS<br><br>COMPLAINTS PROCEDURE IN PLACE.<br><br>DETAILED ODOUR MANAGEMENT PLAN IN PLACE |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| LITTER | PRE-PROCESSING STOCKPILE<br><br>UNSHEETED / POORLY SHEETED SKIPS ON DELIVERY VEHICLES<br><br>LOOSE/MATERIAL<br><br>POOR HOUSEKEEPING<br><br>INCREASED STORAGE & THROUGHPUT OF LIGHT WASTE | AIR | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>FLORA & FAUNA<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A TO C<br>E,F | MI TO MO | 3 | LOW | ALL DRIVERS WILL ENSURE THEIR SKIPS / CONTAINERS ARE SECURELY SHEETED / CONTAINED PRIOR TO CARRIAGE OF WASTE LOADS.<br><br>DAILY INSPECTIONS OF THE SITE AND AREAS IN THE IMMEDIATE VICINITY OF THE SITE BOUNDARY FOR LITTER.<br><br>ALL TIPPING OF WASTE WITH THE POTENTIAL TO CAUSE LITTER WILL BE DONE SO IN A DEDICATED THREE-SIDED BAY AND ALL SORTED WASTE WHICH COULD GIVE RISE TO LITTER I.E. LIGHT WASTES COMPRISING PLASTIC & PAPER/CARDBOARD WILL BE STORED IN A SEALED SKIP<br><br>THE SITE WILL INSTALL DUST/LITTER NETTING AROUND AREAS OF THE SITE WHERE LITTER COULD ESCAPE<br><br>NO LIGHT WASTE LIKELY TO CAUSE LITTER WILL BE STORED EXTERNALLY UNLESS AS PART OF A MIXED LOAD WHICH IS BEING SORTED |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| NOISE/VIBRATION | OPERATION OF MECHANICAL TREATMENT PLANT<br><br>TIPPING OF WASTE<br><br>MANOUEVRING WASTE AROUND THE SITE USING MOBILE PLANT<br><br>REMOVAL OF WASTE FROM SITE USING HGV'S<br><br>INCREASED WASTE THROUGHPUT OF THE SITE<br><br>FAULTY MECHNAICAL TREATMENT & MOBILE PLANT AND EQUIPMENT<br><br>HOT WORKS I.E. WELDING CUTTING | AIR | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>FLORA & FAUNA<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A, D | MO | 3 | LOW/NEAR ZERO | NOISE LIKELY TO BE OF A SIMILAR CHARACTER AND LEVEL OF EXISTING SURROUNDING LAND USES I.E. INDUSTRIAL AND COMMERCIAL BUSINESSES<br><br>NEAREST SENSITIVE RECEPTOR I.E. RESIDENTIAL PROPERTY LOCATED >250M FROM SITE<br><br>DROP HEIGHTS WILL BE KEPT TO A MINIMISE NOISE / VIBRATION.<br><br>MANAGEMENT WILL ENSURE THAT ALL LOADING PLANT OPERATED IS FUNCTIONING SUITABLY I.E. MOVING PARTS TO BE REGULARLY LUBRICATED.<br><br>OPERATIVES WILL BE INFORMED TO TURN OFF ENGINES WHEN THE PLANT IS NOT IN USE AND NO REVVING OF ENGINES WILL BE PERMITTED AT THE SITE I.E. NO IDLING POLICY<br><br>ANY MALFUNCTIONS IN PLANT I.E. MISSING SCREWS/BOLTS WHICH RESULT IN EXCESSIVE NOISE WILL BE DECOMMISSIONED UNTIL AN ALTERNATIVE LOADING PLANT SOURCED.<br><br>COMPLAINTS PROCEDURE IN PLACE.<br><br>IF REPAIRS TO THE SITE ARE REQUIRED, THE WORK IS TO BE UNDERTAKEN WITH DUE REGARD FOR THE POSSIBLE NOISE NUISANCE AND DURING THE NORMAL WORKING DAY.<br><br>IN THE EVENT OF MAJOR REPAIR WORK BEING UNDERTAKEN WHICH IS LIKELY TO CAUSE SIGNIFICANT NOISE AND DISRUPTION, NEIGHBOURING RESIDENTS AND NATIRAL RESOURCES WALES WILL BE NOTIFIED IN ADVANCE<br><br>ALL MECHANICAL TREATMENT OF WASTE IS UNDERTAKEN INSIDE THE WASTE TRANSFER BUILDING TO PROVIDE SCREENING TO SURROUNDING BUSINESSES<br><br>ANY HOT WORKS I.E. WELDING/CUTTING TAKES PLACE INSIDE THE DESIGNATED WORKSHOP BUILDING |
| VERMIN (LEPTOSPIROSIS ETC.) | STORED PUTRESCIBLE/ BIODEGRADABLE WASTES<br><br>INCREASED STORAGE DUSTY WASTE<br><br>INCREASED WASTE THROUGHPUT | WATER, DIRECT CONTACT WITH WASTE | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES | A TO C | MI TO MO | 3 | LOW | WEAR PPE - GLOVES AND MASKS AS APPROPRIATE.<br><br>SITE INSPECTIONS DAILY.<br><br>ANY WASTES CONSIDERED UNSUITABLE AFTER DEPOSIT WILL BE ASSIGNED TO THE QUARANTINE/REJECTED SKIP.<br><br>PEST CONTROLLER WILL BE CALLED TO SITE TO ERADICATE ANY PROBLEMS. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FIRE - SMOKE / PARTICULATES | STORAGE OF WASTES<br><br>COMBUSTION OF WASTES<br><br>ARSON OR VANDALISM<br><br>FAULTY PLANT OR EQUIPMENT<br><br>ELECTRICAL APPLIANCES AND CABLING<br><br>DISCARDED SMOKING MATERIALS<br><br>OPEN BURNING ON SITE OR ON ADJACENT SITES<br><br>OVERHEATING OF STORED WASTE<br><br>SPARKS FROM LOADING BUCKETS/SHOVELS<br><br>HOT WORKS<br><br>LOOSE MATERIAL BUILD UP AROUND<br><br>PLANT/MACHINERY AND EXHAUSTS<br><br>HOT LOADS<br><br>OTHER COMBUSTIBLE NON-WASTE MATERIALS ON OR NEAR THE SITE NOT MENTIONED ABOVE<br><br>BATTERIES WITHIN WASTE DEPOSITS<br><br>VISITORS OR CONTRACTORS<br><br>REACTION BETWEEN WASTES<br><br>CYLINDERS STORED AT SITE<br><br>“TRAMP” METAL<br><br>LEAKS AND SPILLAGES<br><br>RELEASE OF FIRE WATER FROM THE SITE | AIR, DIRECT CONTACT | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>FLORA & FAUNA<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>PRINCIPAL AQUIFER AND ZONE 3 OF THE GWSPZ<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A TO F | MI TO S | 3 | MED | NO FIRES ON SITE<br><br>NO SMOKING PERMITTED ON SITE<br><br>GOOD SITE SECURITY<br><br>LOW STORAGE VOLUMES AND RETENTION TIMES REDUCES RISK OF FIRE<br><br>ALL COMBUSTIBLE WASTES ARE STORED ON AN IMPERMEBALE CONCRETE SURFACE WITH SEALED DRAINAGE I.E. DRAINING TO FOUL SEWER VIA AN INTERCEPTOR<br><br>PREVENTATIVE MAINTENANCE PROCEDURES FOR FIXED AND MOBILE PLANT<br><br>DETAILED FIRE PREVENTION PLAN IN PLACE<br><br>THE SITE WILL OPERATE IN ACCORDANCE WITH THE FIRE PREVENTION PLAN FOLLOWING THE VARIATION OF THIS PERMIT |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| VEHICLE COLLISION/ ACCIDENT | MUD ON ROADS FROM WASTE STORAGE & VEHICLE BODIES<br><br>POOR VISIBILITY<br><br>INCREASED THROUGHPUT OF WASTE | DIRECT CONTACT | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURROUNDING BUSINESSES | A TO F | MI TO S | 3 | LOW | GOOD HOUSEKEEPING/ VEHICLE MANAGEMENT.<br><br>GOOD STOCKPILE MANAGEMENT.<br><br>WEAR PPE – HIGH VISIBILITY JACKET AS APPROPRIATE.<br><br>AN ACCIDENT LOGBOOK SHOULD BE KEPT FOR ALL INCIDENTS.<br><br>ENCOURAGEMENT FOR STAFF FOR GREATER NUMBER OF "ACCIDENT-FREE DAYS" TO ENCOURAGE A SAFER WORKING ENVIRONMENT.<br><br>HSE COMPLIANT RISK ASSESSMENTS FOR ALL SITE ACTIVITIES TO IDENTIFY SITUATIONS WHICH MAY LEAD TO HARM FOR SITE USERS (EMPLOYEES, VISITORS AND MANAGEMENT).<br><br>APPROPRIATE SIGNAGE THROUGHOUT THE SITE.<br><br>DEDICATED PARKING AREAS ON AND OFF SITE FOR HGV'S AND SMALLER VEHICLES |
| LEACHATE | STORED WASTES | GROUND | SURFACE WATERS<br><br>FLORA & FAUNA<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>PRINCIPAL AQUIFER AND ZONE 3 OF THE GWSPZ<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | E, F | MI TO S | 3 | LOW | ALL WASTES WHICH ARE LIABLE TO GIVE RISE TO CONTAMINATION I.E. MIXED/NON-INERT WASTES WILL BE REMOVED FROM SITE IF SITE INFRASTRUCTURE/DRAINAGE IS NOT SUITABLE<br><br>ALL WASTES WHICH ARE LIABLE TO GIVE RISE TO CONTAMINATION I.E. MIXED WASTES ARE STORED AND TREATED ON AN IMPERMEABLE CONRETE SURFACE DRAINING THE FOUL SEWER SYSTEM VIA AN INTERCEPTOR<br><br>REGULAR CHECKS OF SITE SURFACE INFRASTRUCTURE.<br><br>ANY SPILLAGES IDENTIFIED WILL BE DEALT WITH IN ACCORDANCE WITH THE SPILLAGE PROCEDURES OUTLINED IN THE SITES EMS. |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| IMPACT / INJURY | COLLAPSE OF STORED MATERIALS/ FALLING MATERIALS<br><br>VEHICLE COLLISION/ ACCIDENT | DIRECT CONTACT | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURROUNDING BUSINESSES | A TO C | MI TO S | 3 | LOW | STORAGE HEIGHTS WILL BE KEPT TO A MINIMUM AND STORED WASTES WILL BE WITHIN BAYS/CONTAINERS.<br><br>DROP HEIGHTS WILL ALWAYS BE KEPT TO A MINIMUM.<br><br>APPROPRIATE PPE ISSUED TO ALL SITE STAFF AND AVAILABLE IN THE MAIN SITE OFFICE.<br><br>STAFF TRAINING AND HANDLING PROCEDURES IN PLACE.<br><br>APPROPROPRIATE SIGNAGE THROUGHOUT THE SITE.<br><br>DEDICATED PARKING AREAS FOR HGV'S AND SMALLER VEHICLES ON AND OFF SITE. |
| HYDROCARBONS | UNBUNDED FUEL TANKS<br><br>DRIPS WHEN REFUELLING DURING DELIVERY<br><br>LEAKAGE FROM STORED DRUMS<br><br>PLANT FAILURE | GROUND - DIRECT CONTACT, INGESTION INHALATION (OF VOLATILES) | SURFACE WATERS<br><br>FLORA & FAUNA<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>PRINCIPAL AQUIFER AND ZONE 3 OF THE GWSPZ<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A, B, D, E, F | MI TO S | 3 | LOW | ANY FUEL TANKS (AND PIPEWORK) TO BE STORED WITHIN A BUNDED AREA AND LOCKED WHEN NOT IN USE.<br><br>ANY HYDROCARBONS WOULD BE COLLECTED WITHIN THE CONCRETE SURFACE WHICH IS SEALED AND THEN BE DISCHARGED TO THE FOUL SEWER SYSTEM VIA AN INTERCEPTOR<br><br>ENSURE THAT ALL FUEL DRUMS CONTINUE TO BE STORED SECURELY.<br><br>SPILL KITS KEPT CLOSE TO SOURCE(S) OF HAZARDS.<br><br>PREVENTATIVE MAINTENANCE SCHEDULE FOR PLANT/MACHINERY.<br><br>ANY SPILLAGES IDENTIFIED WILL BE DEALT WITH IN ACCORDANCE WITH THE SPILLAGE PROCEDURES OUTLINED IN THE EMS. |

| Hazard / Potential Contaminant or Situation | Source(s) | Pathway | Receptor(s) | Consequences | Effect | Probability | Assessment Outcome | Remedial Action/ Recommendations/ Comments |
|---|---|---|---|---|---|---|---|---|
| RELEASE OF GASES / FUMES / VAPOURS / VOLATILES | MIXING OF WASTE/ CHEMICALS<br><br>SPILLAGE OF CHEMICALS<br><br>OVERTURNED VEHICLE<br><br>PLANT/PLANT FAILURE<br><br>REACTION BETWEEN STORED WASTES | AIR<br><br>GROUND<br><br>WATER<br><br>CONFINED SPACES | SITE PERSONNEL / VISITORS<br><br>SURROUNDING SITE USERS / OCCUPIERS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>FLORA & FAUNA<br><br>RESIDENTIAL RECEPTORS<br><br>SURROUNDING BUSINESSES<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A TO F | MI TO S | 3 | LOW | ENSURE ANY STORAGE OF HAZARDOUS SUBSTANCES IN PROPERLY DESIGNATED AREAS (I.E. WORKSHOP).<br><br>NO HAZARDOUS WASTE ACCEPTED.<br><br>PREVENTATIVE MAINTENANCE SCHEDULE FOR PLANT/MACHINERY.<br><br>QUARANTINE OF REJECTED (I.E. POTENTIALLY HAZARDOUS) WASTES.<br><br>DEDICATED CAGED GAS BOTTLE STORAGE AREA ON SITE. |
| CONTAMINATION OF SURFACE / GROUND WATERS | FLOODING OF SITE – THE SITE LIES IN CLOSE PROXIMITY TO FLOOD ZONES 2 & 3 | FLOOD WATERS I.E. IF WASTE IS WASHED OFF SITE IT MAY CONTAMINATE BUILDINGS / GARDENS / NATURAL HABITATS DOWNSTREAM | SITE PERSONNEL/ VISITORS<br><br>SURFACE WATERS – INCLUDING THE RIVER CHURNET (MAIN RIVER) AND CALDON CANAL<br><br>LADDEREDGE COUNTRY PARK (LNR)<br><br>DECIDUOUS WOODLAND (PRIORITY HABITAT)<br><br>BROWN TROUT, BULLHEAD AND PROTECTED SPECIES - CODE 2.<br><br>LOCAL WILDLIFE SITE, BIRCHALL MEADOW | A to F | Mi to S | 3 | Low | MANAGEMENT SYSTEM THAT IDENTIFIES AND MINIMISES RISKS OF POLLUTION, INCLUDING THOSE ARISING FROM OPERATIONS, MAINTENANCE, ACCIDENTS, INCIDENTS, NON-CONFORMANCES (WILL INCLUDE FLOOD RISK MANAGEMENT).<br><br>ALL LIQUIDS ARE PROVIDED WITH SECONDARY CONTAINMENT (APPLIES TO WASTES AND NON – WASTES SUCH AS FUELS.<br><br>SUBSCRIPTION TO MET OFFICE FOR WEATHER ALERTS SO NECESSARY ACTION CAN TAKE PLACE PRIOR TO A FLOOD EVENT (IF ONE WERE TO OCCUR)<br><br>FLOODING EMERGENCY PLAN KEPT IN SITE OFFICE.<br><br>ALL CONCRETED AREAS OF THE SITE BENEFIT FROM A SEALED DRAINAGE SYSTEM, HARDSTANDING AREAS OF THE SITE DO NOT STORE ANY MATERIALS LIKELY TO POLLUTE OFF SITE SURFACE WATERS |

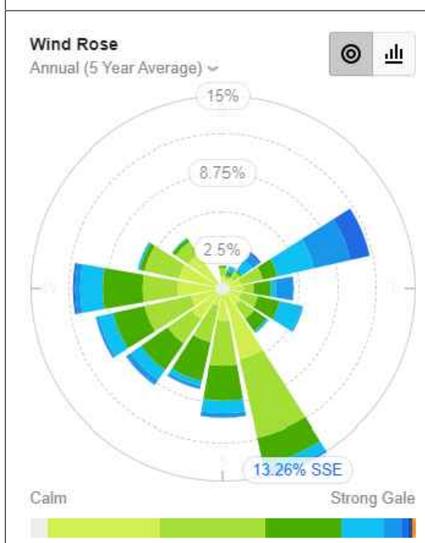
# Appendix I

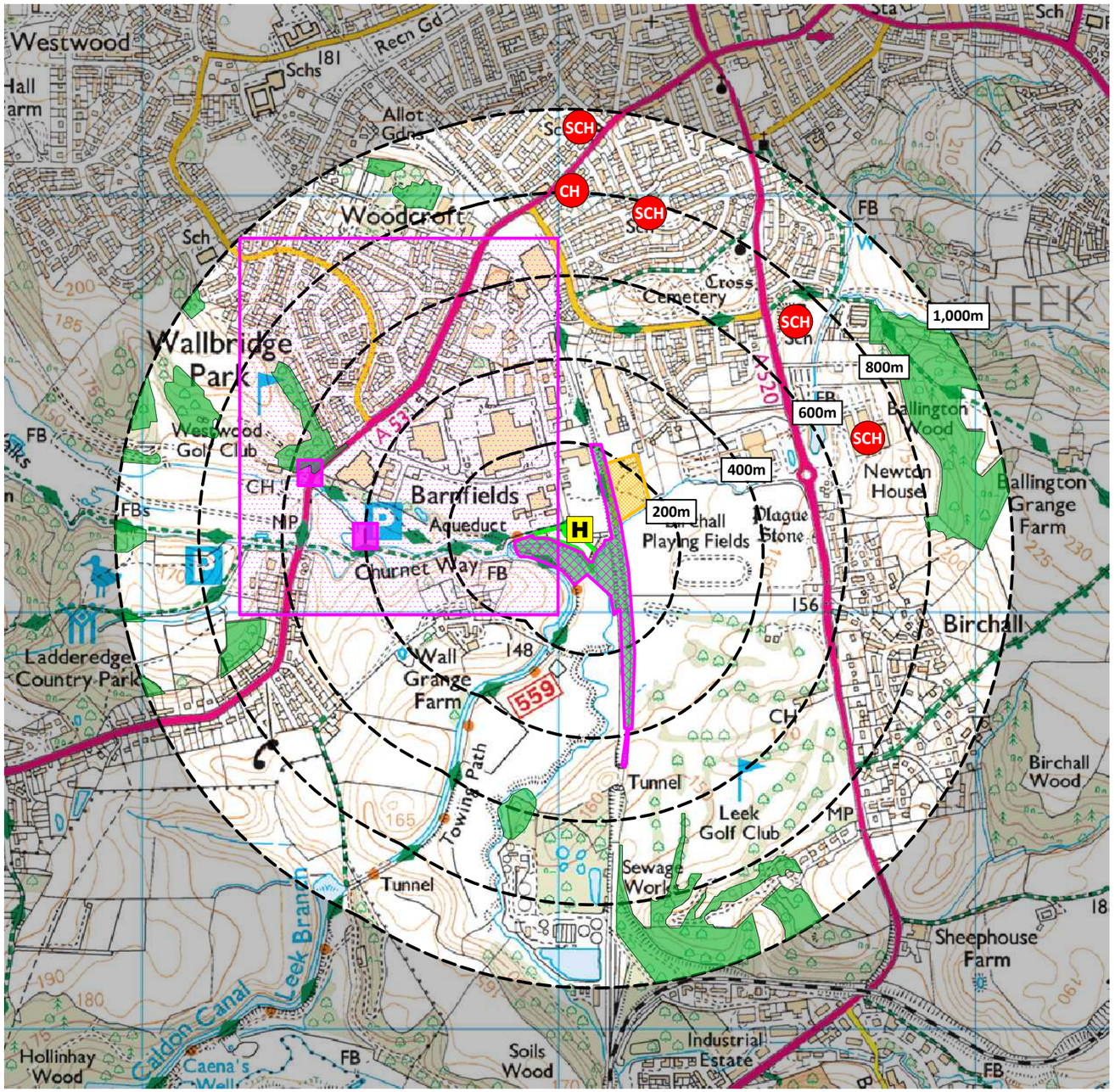
# Receptor Plan

**KEY:**

- Permit boundary
- Surface water body ( pond / pool / lake)
- Stream, river, beck
- Buildings includes Agricultural, industry, commerce and retail - could also include small houses)
- Residential blocks
- Class A roads
- Class B roads
- Class C roads
- Priority Habitat - Deciduous Woodland
- Birchall Meadow (LWS)
- Protected fish
- Protected fish migratory route
- Protected habitats
- SCH — Schools including primary, high, colleges and Universities
- CH — Care homes
- Places of worship
- H — Fire hydrants (indicative)

Compass Wind Rose for Leek, Staffs.
Annual (5 year average)
*- source: Willy Weather*




Scale Bar (1:12,500)

0 km — 500 m — 1 km

**NOTES**

1. Boundaries are shown indicatively.
2. Wind rose data shows the prevailing wind direction from the south blowing north.

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REVISION HISTORY

| Rev | Date | Init: | Description: |
|---|---|---|---|
| - | 27.4.21 | CP | Initial Drawing |
| A | 25.11.21 | CP | Added receptors |

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

**DRAWING TITLE**
RECEPTOR PLAN

**CLIENT**
R Bestwick and Sons Ltd

**PROJECT/SITE**
The Scrap Yard, Barnfields Industrial Estate, Leek, Staffordshire ST13 5QG

| SCALE @ A3 | JOB NO | CLIENT NO |
|---|---|---|
| 1:12,500 | 001 | 2920 |

| DRAWING NUMBER | REV | STATUS |
|---|---|---|
| BAR/2920/04 | A | Issued |

| DRAWN | CHECKED | DATE |
|---|---|---|
| CP | -- | 25.11.21 |

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