D. Hughes Demolition & Excavation Ltd.

Plan Of Work

Part of Firth Rixson Super Alloys Ltd., Shepley Street, Glossop, SK13 7SA.

for

Wiggett ConstructionLtd.

Issue date: Prepared by: April 2014 Mr. S. Haigh (Asbestos Manager)

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Declaration – Part of Firth Rixson Super Alloys Ltd., Shepley Street, Glossop, SK13 7SA.

Part of Firth Rixson Super Alloys Ltd., Shepley Street, Glossop, SK13 7SA.

1.00 Details Of The Contract.

1.01. Client.

Wiggett Construction Ltd., Cheshire Street, Mossley, Ashton-under-Lyne, Lancashire, OL5 9NG. Contact: Mr. D. Higgins Tel: 0161 626 3010 E-mail: dave@wiggett.co.uk

1.02. Site Address.

Part of Firth Rixson Super Alloys Ltd., Shepley Street, Glossop, SK13 7SA.

1.03. Asbestos Removal Contractor.

D. Hughes Demolition & Excavation Ltd. Contact: Mr. S. Haigh Coteman Heights Farm, Tel: 0161 624 3460 Delph, Email: dhughesdemo@btconnect.com Oldham, OL3 5RW.

1.04. Number Of Operatives.

3 No. Operatives.1 No. Supervisor.

1.05. Commencement Date.

6th May 2014.

1.06. Working Hours.

Monday - Friday - 8am - 5pm.

1.07. Duration Of Works.

8 no. days.

1.08. Design Team.

Not applicable.

1.09. Other Asbestos License Holders.

Not applicable.

1.10. Analytical Laboratory.

AEC Ltd., 23, Wheelforge Way, Ashburton Point, Trafford Park, Manchester, M17 1EH.

Tel: 0161 872 7111 Fax: 0161 872 7112

Fax: 0161 872 7112 Quality Consultants, Sladen Wood Mill, Todmorden Road, Littleborough,

Tel: 01706 374214 Fax: 01706 371069

OL15 9EW.

2.00. Management Of The Work.

2.01. Attendances.

The site Supervisor will be in attendance throughout the removal works.

2.02. External Monitoring – Enclosures.

Viewing panels will be included to the enclosures and the inner stages of the air and bag locks.

Environmental Evaluation Ltd., Lawton Square, Delph, Oldham, OL3 5DT.

Tel: 01457 873266 Fax: 01457 870966 2.03. Site Supervisor.

Site Supervisor - Asbestos Removal - Mr. S. Haigh – Mobile No. 07973 347688 Mr. R. Hughes – Mobile No. 07968 551318 Office No. 0161 624 3460

2.04. Plan Of Work Amendments.

Any amendments made to the Plan of Work will be undertaken by the site Supervisor on site. Any amendments will be dated and signed.

All operatives involved with this work will be informed by the site Supervisor at that time.

3.00. Scope Of The Work.

3.01. Asbestos Survey.

RB Asbestos Consultants, Unit 2, Empire Business Centre, Empire Way, Burnley, Lancashire, BB12 6HA.

Report Number. 5841 Survey Date. 31st October 2013 Type. Refurbishment / Demolition

Tel: 0114 246 4381

3.02. Bulk Samples.

TVR Analysis, Suite 9B, Cavendish House, The Village, Birchwood Technology Business Park, Birchwood, Warrington, Cheshire, WA3 6BU.

Tel: 01925 811622

3.03. Description Of The Work.

Removal of the asbestos containing materials and environmental cleansing of the areas as far as reasonably practical.

3.04. Location.

Area 1. Offices – Asbestos insulation board debris. Area 2. External Boiler Room – Asbestos insulation debris. Area 3. Tank Room – Asbestos insulation debris.

3.05. Removal Method.

All areas – Fully controlled conditions.

3.06. Asbestos Type.

Area 1. Offices - Asbestos insulation board debris - Amosite / Chrysotile.

Area 2. External Boiler Room – Asbestos insulation debris – Amosite / Chrysotile.

Area 3. Tank Room – Asbestos insulation debris – Chrysotile.

Quantity And Condition.

Area 1. Offices – Asbestos insulation debris – Quantity 80m² - Poor condition. Area 2. External Boiler Room – Asbestos insulation debris – Quantity 20m² - Poor condition.

Area 3. Tank Room – Asbestos insulation debris – Quantity 6m² - Poor condition.

3.07. Access.

Area 1. Podium steps. Area 2. Nothing required. Area 3. Ladder.

3.08. Fire Risk And Precautions.

A Hot Works Permit will be sought prior to any hot works being carried out.

Fire fighting equipment and an air horn for raising a fire alarm will be provided by and placed near the area of work.

3.09. Safe Place Of Work.

All work will be kept clean and tidy at all times.

3.10. Other Risks And Precautions.

Manual Handling – Trained operatives (Manual Handling / Safe Lifting Techniques Training Course) will undertake the work.

4.00. Control Measures.

4.01. Expected Exposure To Asbestos Fibres / Controls Applied.

All areas - Less than 2 f/ml.

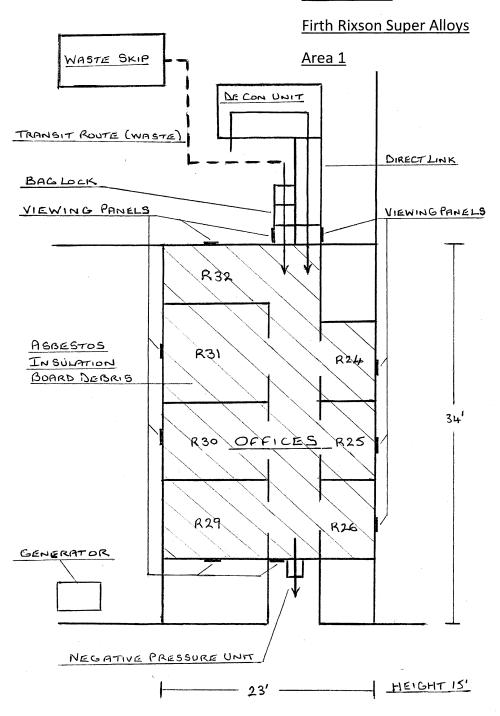
4.02. Controls To Be Applied By The Contractor.

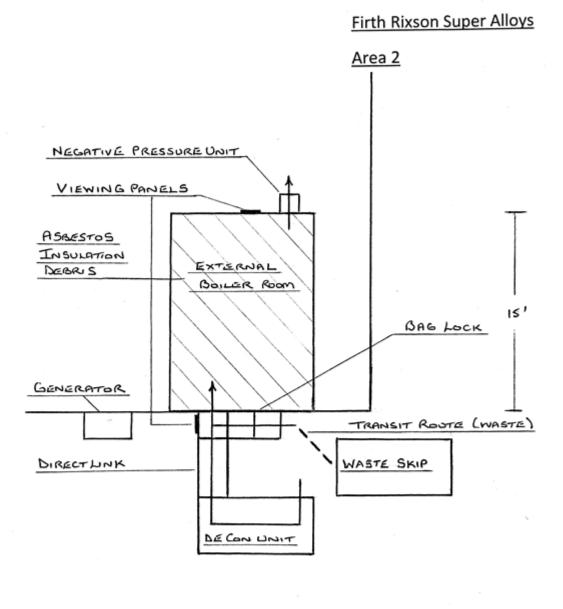
All areas. The sprayed asbestos insulation will be removed under fully controlled conditions. Prior to any disturbance the asbestos insulation / board debris will be presoaked with a suppressant solution which will be applied from a low pressure spray gun. Prior to any removal works a suppressant solution will be applied to the asbestos insulation / board debris using a low pressure spray gun.

4.03. Sketches.

Overleaf.

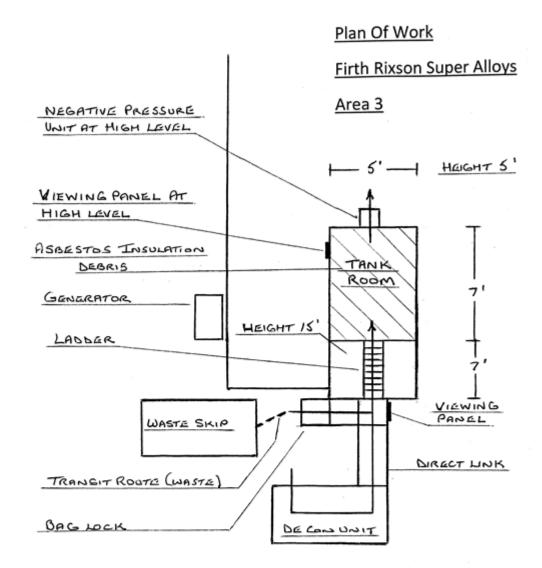
Plan Of Work





Plan Of Work





4.04. Calculations For Negative Pressure Units.

 $\frac{\text{Area 1 - Offices}}{34\text{ft x 23ft x 15ft high} = 11730\text{ft}^3 = 327\text{m}^3}$ Multiply by 10 min air changes = 117300\text{ft}^3 Divided by 60 minutes = 1955 cfm required.



4.04. Calculations For Negative Pressure Units - Continued.

<u>Areas 2 – External Boiler Room.</u> 15ft x 13ft x 15ft high = 2925ft³ equivalent to 83m³

This enclosure is less than 120m³ and therefore requires a minimum of 590cfm.



4.04. Calculations For Negative Pressure Units - Continued.

 $\frac{\text{Areas 3} - \text{Tank Room.}}{7 \text{ft x 5 ft x 5 ft high} = 175 \text{ft}^3 \text{ equivalent to 5 m}^3}$

Additional ladder access. 7ft x 5ft x 15ft high = 525ft³ equivalent to 15m³

This enclosure is less than 120m³ and therefore requires a minimum of 590cfm.



4.04. Calculations For Negative Pressure Units - Continued.

Negative Pressure Units Required - hired in:

Area 1.	1 No. 2000 cfm unit.
Area 2.	1 No. 1000 cfm unit.
Area 3.	1 No. 1000 cfm unit.

4.05. R.P.E. Respirators.

Full Face.

Protector Sabre Phantom

Specifications:-	
Approved	BS EN 147
Protection factor	40
Normal protection factor	2000
Minimum design flow rate	120 litres / minute
Initial flow rate	160 litres / minute

Half Face.

Sundstrom SR100

Specifications:-	
Approved	BS EN 140
Class	P3

4.06. Air Monitoring Arrangements.

Personnel monitoring will be undertaken during the removal work.

For work involving the removal of asbestos insulation boards the frequency of personnel monitoring will be 50% of all contracts.

4.07. Smoke Testing And Witnessing.

A representative from D. Hughes Demolition & Excavation Ltd. will witness all smoke tests on site.

4.08. Control Measures, Maintenance And Site Checks.

Prior to the use of the DCU a Filtration Test Certificate and an Air Test Certificate will be sought from the hirer for the previous use and placed within the site file.

Filtration Test Certificates for the negative pressure units and the vacuums will be sought from the hirer and placed within the site file.

Site check lists will be filled out daily prior to any works commencing and placed within the site file.

A daily RPE inspection report will be filled out prior to an operative using their equipment and placed within the site file.

The hours that operatives have been exposed to asbestos fibres will be recorded and placed within the site file.

5.00. Method Of Work.

5.01. Additional Precautions To Reduce Exposure.

The more roughly the asbestos product is treated and the more it is handled the more asbestos fibres will be released.

Careful handling of the asbestos product will apply.

- 5.02. Site Specific Method Statement.
- 1. The site will be made secure by means of temporary fencing, existing fencing or similar.
- 2. The Plan of Work to be situated on site and be readily available to all parties.
- 3. A de contamination unit and sealed asbestos waste skip will be provided and set up as close as possible to the removal areas, the de contamination unit will be directly linked to all areas.
- 4. All operatives will be fully trained to the relevant standard as required for the type of removal works and hold current Medical Certificates, mask face fit tests, et
- 5. All operatives will read and fully understand the site specific Plan of Work.
- 6. A competent asbestos removal Supervisor will be in attendance daily and at times relevant to the operations to ensure the safe system of work is strictly adhered to.

- 5.02. Site Specific Method Statement.
- 7. The areas designated for asbestos removal will be sealed off with suitable barriers.
- 8. Warning signs will be affixed wherever necessary.
- 9. All operatives will wear R.P.E. and P.P.E. suitable to the types of activities to be carried out.

Condition of asbestos insulation board to Area 1 - Offices.



5.02. Site Specific Method Statement - Continued.

Condition of asbestos insulation debris to Area 2 – External Boiler Room.



Condition of asbestos insulation debris to Area 3 - Tank Room.



- 5.02. Site Specific Method Statement Continued.
- 10. The asbestos insulation / board debris will be removed using fully controlled conditions.

The areas will be pre cleaned and any redundant structures, furniture, etc., will be cleared / removed.

Enclosures will be constructed. Parts of the building structure will be used, however any walls or surfaces may be sheeted over.

A direct link and bag lock will be constructed and affixed as shown on the sketches attached.

Position of decontamination unit to Area 1 - Offices.



Position of decontamination unit to Area 2 – External Boiler Room.



5.02. Site Specific Method Statement – Continued.

Position of decontamination unit to Area 3 - Tank Room.



Negative pressure units will be affixed to the enclosures as shown on the sketches attached. The units will provide at least 10 air changes per hour for enclosures greater than 120m³ or airflow of at least 1000m³ per hour for smaller enclosures.

The enclosures will be tested prior to use.

The removal work involves the removal of asbestos insulation / board debris from each of the areas.

Prior to any removal works a suppressant solution will be applied to the asbestos insulation / board debris using a low pressure spray gun.

The fibre suppressant will be applied until the asbestos insulation / board debris becomes fully saturated.

Area 1 – Offices.

The asbestos insulation board debris left on the ceiling grid will be carefully unscrewed and removed.

The metal ceiling grid will be removed and treated as asbestos.

The general debris left within the offices will all be removed and treated as asbestos.

5.02. Site Specific Method Statement – Continued.

Area 2 – External Boiler Room.

The asbestos insulation debris will be removed off the floor using hand tools.

Operatives will use hand tools comprising of scrapers and wire brushes.

The floor will be thoroughly scraped and wire brushed whilst applying shadow vacuuming.

Area 3. Tank Room.

The general debris left within the tank room will be treated as asbestos.

The floor will be thoroughly scraped and wire brushed whilst applying shadow vacuuming.

All the asbestos insulation / board debris arising will be either double bagged or wrapped in two layers of 1000g visqueen, sealed and marked as containing asbestos and placed into the asbestos waste skip.

On completion of the asbestos removal work all of the areas will be thoroughly decontaminated

- 12. Individual 4 stage clearance testing will be undertaken to all of the areas.
- 13. All site documentation will be collected together and forwarded to the Head Office.
- 14. The decontamination unit and sealed asbestos waste skip will be removed off site.
- 15. All barriers, warning signs, etc., will be removed off site.
- 16. Any temporary fencing used will be removed off site.
- 17. Waste disposal notes will be sought and placed in the file at the Head Office.
- 5.03. Fibre Suppressant.

Bostik Indenden 30 - 330 - Dampstrip asbestos penetrant.

5.04. Wet Strip – Injection Technique.

Not applicable

5.05. Tools.

A selection of hand tools will be used.

5.06. Equipment.

Hired In Plant Supplier.

Specialist Hires Ltd., Broom Grove Lane, Denton, Manchester, M34 3DU.

Tel:	0161 320 8587
Fax:	0161 320 6595

5.06. Equipment – Continued.

Hired In Plant List.

No. Fully self-contained decontamination unit.
H type vacuum cleaners.
Various leads and electrical equipment
Smoke generator.
Negative pressure units.

5.06. Equipment.

Hygiene Facilities.

All units will comply with HSG 247.

Controlled Wetting Equipment.

All units will comply with the requirements of BS8520-1:2009.

5.06. Equipment – Continued.

Negative Pressure Units.

All units will comply with the requirements of BS8520-2:2009.

Vacuum Equipment.

All equipment will be class H approved and comply with the requirements of BS8520-3:2009.

5.07. Working With Asbestos Insulation / Board.

The asbestos insulation / board debris will be sprayed with a fibre suppressant prior to any disturbance.

The fibre suppressant will be applied using an airless low pressure spray gun which will have a single spray head attached.

The fibre suppressant will be applied until the asbestos insulation / board becomes fully saturated.

6.00. Other Site-Specific Information.

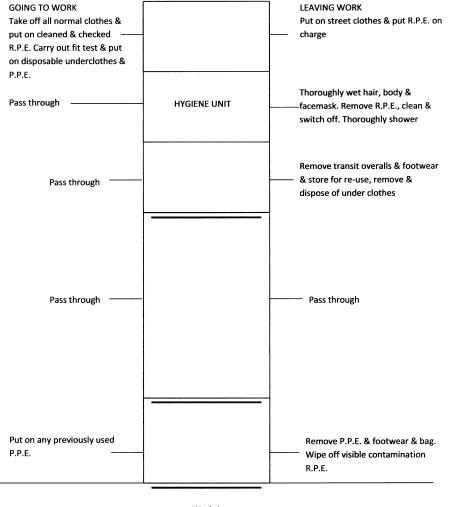
6.01. DCU.

On completion of all the work on site the hygiene unit will be subject to a visual inspection and an air clearance test.

6.02. DCU / Enclosure Entry / Exit Procedures.

Overleaf.

TRANSIT PROCEDURE



Work Area

Vacuum off P.P.E. & R.P.E. Provide bucket & sponge to clean footwear

D. Hughes Demolition & Excavation Ltd.

6.03. Welfare Facilities.

Welfare facilities will be provided by D. Hughes Demolition & Excavation Ltd.

6.04. Waste Disposal.

Viridor Waste Exeter Ltd., Pilsworth South Landfill, Pilsworth Road, Bury, BL9 8QZ.

Tel: 0161 796 0616

6.05. Emergency Procedures.

- 1. Any asbestos disturbed during an enclosure erection will be cleaned up immediately. The area will be barriered off. An operative fully protected but wearing transit overalls will clear up the debris. Any unsealed asbestos insulation will be sealed to prevent any further asbestos fibre release.
- 2. Spare respirator to be made available on site during removal works.
- 3. First aid box to be made available.
- 4. Mobile phone to be made available on site.
- 5. In case of collapse / injury contact emergency services if required.

Prepared by D. Hughes Demolition & Excavation Ltd.

Dated: April 2014.

Signed:

Mr. S. Haigh (Contracts Manager)

Declaration

Applicable to all employees of **D. Hughes Demolition & Excavation Ltd.**

Site Address: Part of Firth Rixson Super Alloys Ltd., Shepley Street, Glossop, SK13 7SA.

I have read and fully understand this Plan of Work inc. Risk Assessments / COSHH Data for the asbestos containing material removal and disposal (notifiable work) from the above property.

<u>Name</u>	<u>Signature</u>	<u>Date</u>
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