Arup Consulting Engineers

APPENDIX 3

A3.1 MINCHEM PROCEDURE: ACCEPTANCE OF WASTE AT THE TRANSFER STATION

MinChem
PART OF THE INDAVER GROUP

Procedure: Acceptance of Waste at the Transfer Station

Reference	Status	Version	Owner
Operations_4.1	Authorised	2	Patricia McGrath

Type Operations Manual Sub-Type Transfer Station

1. Purpose
The purpose of this procedure is to outline the acceptance procedure for waste entering the Transfer Station

2. Definition

3. Responsibilities
It is the responsibility of MinChem's site operations team, customer support personnel and sub-contractors to adhere to this procedure.

4. References
Regulations affecting Movement of Waste

For shipments of waste within Ireland, C1 Forms are required for compliance with Waste Management (Movement of Hazardous Waste) Regulations 1998.

Regulations affecting Transport of Waste

The regulation affecting the transport of hazardous waste in Ireland is the ADR Framework Directive for the transport of dangerous goods by road. All material will be labelled and packaged in accordance with the ADR.

"Instructions for the completion of Consignment notes for Hazardous Waste" - Shipping Handbook

Waste Receipt Checklist generated from Tracker under Transport/Consignment/Fax/Checklist

Waste Receipt Checklist	Operations 4.1.1
Inspection of Packages for Carrying Waste	Operations 5.3
Transfer Station Customer Log Found in Data\Exceldata\Transfer Station Registers	Operations 5.3.1
Repackaging of Waste	Operations 5.10
Spill Clean Up at Transfer Station	Operations 8.2
Taking Photos at the Transfer Station	Operations 4.14

5. Procedure
Operation

The primary operational activities of the Transfer Station will be:

- Acceptance and recording of drummed, packaged or bulk waste
- Storage and segregation of this waste
- Assembling loads for transport to the disposal/recovery site
- Storage of ISO tank containers, Box Containers and trailers

Acceptance Procedure

All drivers must report to the site office immediately upon arrival at the Transfer Station. They must produce their documentation which must be checked by a member of the site operations team or the responsible logistics person.

All drivers must switch off their mobile phones, wear protective glasses and high visibility vests.

Arrival at the Transfer Station - Full Loads

On arrival at the Transfer Station of full loads (not requiring handling):

The site operations team is to be consulted before any load is let beyond the barrier in the transfer station.
*(Exceptions to this can be made for **loads transiting through the transfer station**. In this case the logistics person responsible for the load must supervise the arrival of the load)*
In all cases the following steps must be followed:

- If the load is parking up or being dropped then the trailer/box/tank must be entered onto the **site map** in reception area detailing the following:

  Trailer/box/tank number, enquiry number, name of customer, date off site if applicable

- For **loads prenotified prior to arrival at the transfer station,** the paperwork must be checked and the load details entered in the **Dublin Corporation In/Out log**, located in the reception area

- For **loads that have not been prenotified prior to arrival at the transfer station**, the dropping of the trailer + box on site **must be** recorded in the **Haulier on Site report log**, which is located in the reception area, denoting the following;

  Time + Date of drop
  Haulier
  Container/Trailer number
  Activity involved on site

  For Example

07/02/00	9.00	JP Ryan	Drop box CRXU 230987/0	(on trailer)

Document Check

On arrival at the transfer all waste material must be accompanied by the following documentation

- C1 form (parts A and B completed). The details of the waste are given on an annex to the C1.

- Tremcards in English (If hazardous).
- ADR Document - (The ADR documents are only required for hazardous material however the C1 annex also acts as the ADR document and hence material is always accompanied by ADR documents)

Completion of C1

It is very important to ensure that the C1 is fully completed. On arrival at the transfer station parts C must be completed (parts A and B should already have been completed). A C1 comprises of the following sections:

1. **Part A (to be completed by consignor*)** - Name and address of Consignor
2. Name and chemical composition of the waste (this section can simply refer to an attached C1 annex)
3. European Waste Catalogue/Hazardous Waste List Description(s) and Code(s)
4. Origin of Waste (name and address of producer if different from 1)
5. Process(es) that waste originates from
6. Quantity (indicate kg or litres)
7. Size, type and number of containers
8. Physical characteristics
9. Components which are hazardous (giving concentrations in each case)
10. Hazardous properties and special handling instruction (if any)
11. Name and address of consignee
12. Consignor declaration - Signature of consignor, date, name of consignor (in block letters), on behalf of (name of company) and position held by person signing.
13. **Part B (to be completed by carrier**)** - Vehicle registration, time (of collection), date (of collection), signature of driver, on behalf of (haulage company), name of driver (block letters), signature of consignor as witness.
14. **Part C (to be completed by the consignee***)** - Name and address of consignee, Telephone, Fax
15. Waste licence number (if applicable) - MinChems waste licence number is 36-1. Waste permit number (if applicable) - not applicable to MinChem. Certificate of registration (if applicable) - not applicable to MinChem.
16. Enter the following info.: carrier (haulage company), vehicle registration number, time of delivery, date of delivery, name of consignor (customer)
17. Enter a yes in either (a) or (b) signifying that (a) The consignment was accepted or (b) The consignment was rejected
18. If rejected enter reasons why
19. If accepted, state the recovery/disposal activity to which waste will be subject to - Enter D15 (storage pending any of the disposal operations numbered D1 to D12) if material destined for disposal or R13 (accumulation of materials intended for any recovery operation numbered R1 to R12) if material destined for recovery
20. Consignee declaration - Enter signature, date, name (block letters), on behalf of (enter MinChem) and position held by person signing.

**Consignor - customer*
***Carrier - haulier*
****Consignee - MinChem*

Part A - Sections 1 to 11 should have been fully completed by the responsible MinChem customer support/logistics person when preparing the load pack If any of these sections have not been completed bring to the immediate attention of the responsible person and ensure completion at that time.
Part A - Section 12 - This section should have been completed by the customer at the time of collection.

Part B - Section 13 must be completed and signed by the haulier and witnessed by the customer. If any details have been left blank bring to the immediate attention of the haulier and ensure completion at that time.
Part C - Sections 14 to 20 - must be completed upon arrival at the transfer station.

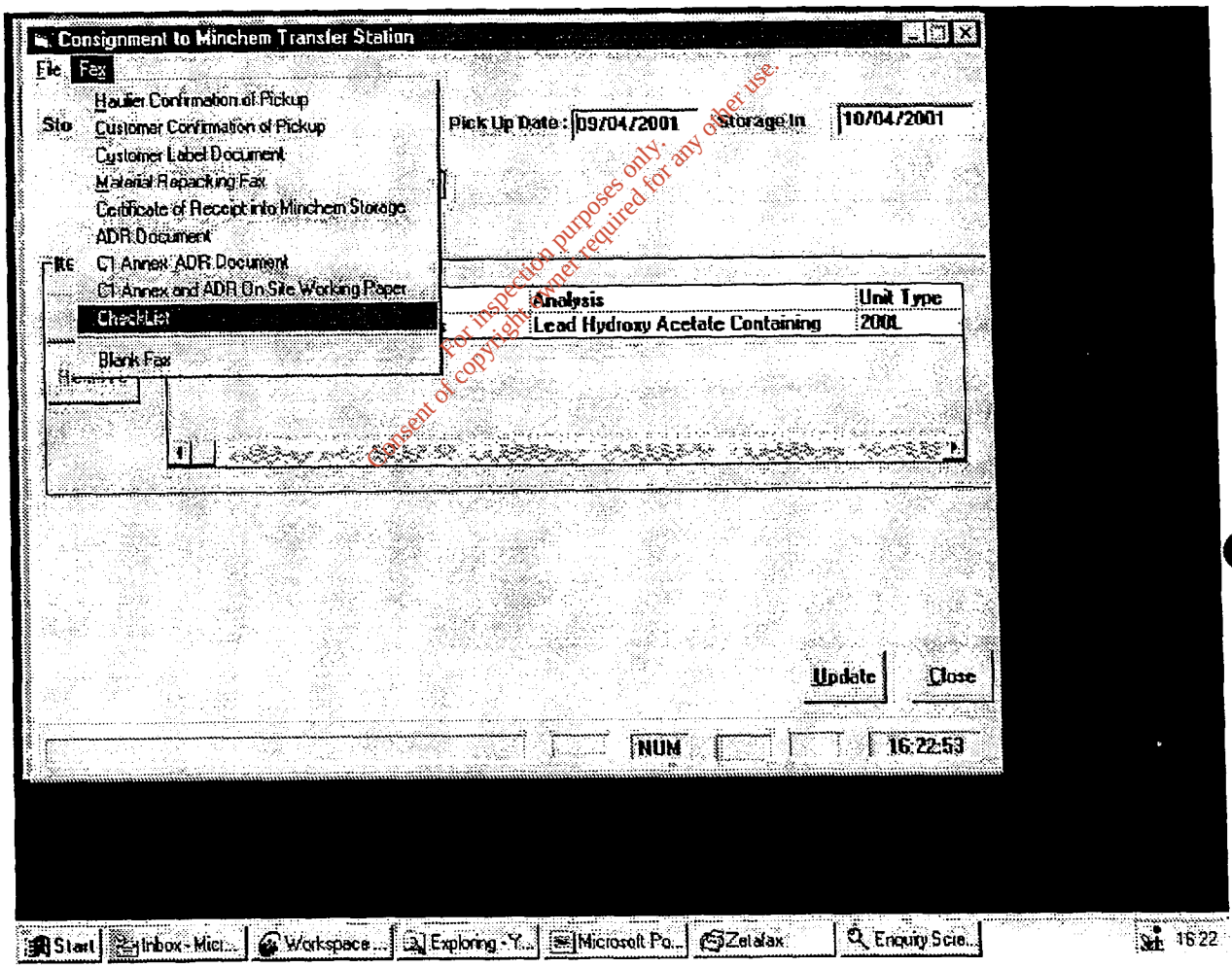
"Instructions for the completion of Consignment notes for Hazardous Waste" are available in the Shipping Handbooks

Unloading of Packaged Waste

When the Document Check has been completed the waste is unloaded. Unloading of packaged waste must be carried out in the designated area (this is directly in front of the bunded storage area). Drain blockers must be put in place when any unloading or checking in is being carried out.

Each pallet/package must be inspected (see On Site Inspection and Verification Section below) must be weighed and the weight entered on the **Waste Receipt Checklist** along with the full details on the label and the unit size and type of packaging.

The Waste Receipt Checklist is generated from Tracker under Transport/Consignment/fax/Checklist.



There is also a blank checklist available - Operations 4.1.1.

Pallets should be wrapped or banded as appropriate before being put on racks and the final bay location must also be entered onto the checklist.

Packages are stored and segregated in the bunded areas according to their hazard classes as follows:

- Flammable
- Toxic
- Corrosive
- Oxidizing
- Spontaneously combustible
- Dangerous when wet

This list is then passed to the relevant customer support person for registration onto tracker (see Registration of Waste section below)

On Site Inspection and Verification

If the number or type of packages on the consignment differs from what is written on the C1 form, then the C1 **must** be amended to reflect what has actually arrived.

All packages will be checked visually on arrival (see Procedure for Inspection of Packages for carrying Waste Operations 5.3).

If any leaking drums are present appropriate PPE should be immediately donned. Minimum PPE - Yellow splash suit, full face mask and safety gloves.

Any drums/packages that are not in a satisfactory condition will be cross-pumped; put into overdrums or repacked depending on the nature of the material. Any hazardous material in non-UN approved packaging will automatically be repackaged(see Operations 5.10 Repackaging of Waste).

The Site Operations Manager must be consulted prior to repackaging.

Non conforming material will be photographed digitally (see Operations 4.14) and stored appropriately until the most suitable method of repackaging is agreed with the Site Operations Manager. All photographs will be saved onto the relevant jobfile.

The details of the non-conforming material must be entered in Operations 5.3.1 Transfer Station Customer Log.

The customer will be informed of any non-conforming material by means of Material Repacking fax (see Operations 5.10 Repackaging of Waste).

Details of non conforming material and action taken must be entered in Tracker.

Registration of Waste

A computer register will be kept of all waste material entering, stored and leaving the transfer station. On receipt of the Waste Receipt Checklist the relevant customer support person must check the following information on Tracker against that on the checklist. (For material sent by the Cork Office the site operations team complete the following and then fax the material receipt checklist to the relevant person in the Cork Office)

- Name of Haulier. (A master list of all Haulier information is kept on Tracker including address, telephone number, fax number, contact name)
- Name of Waste Producer. (A master list of all Producer information is kept on Tracker

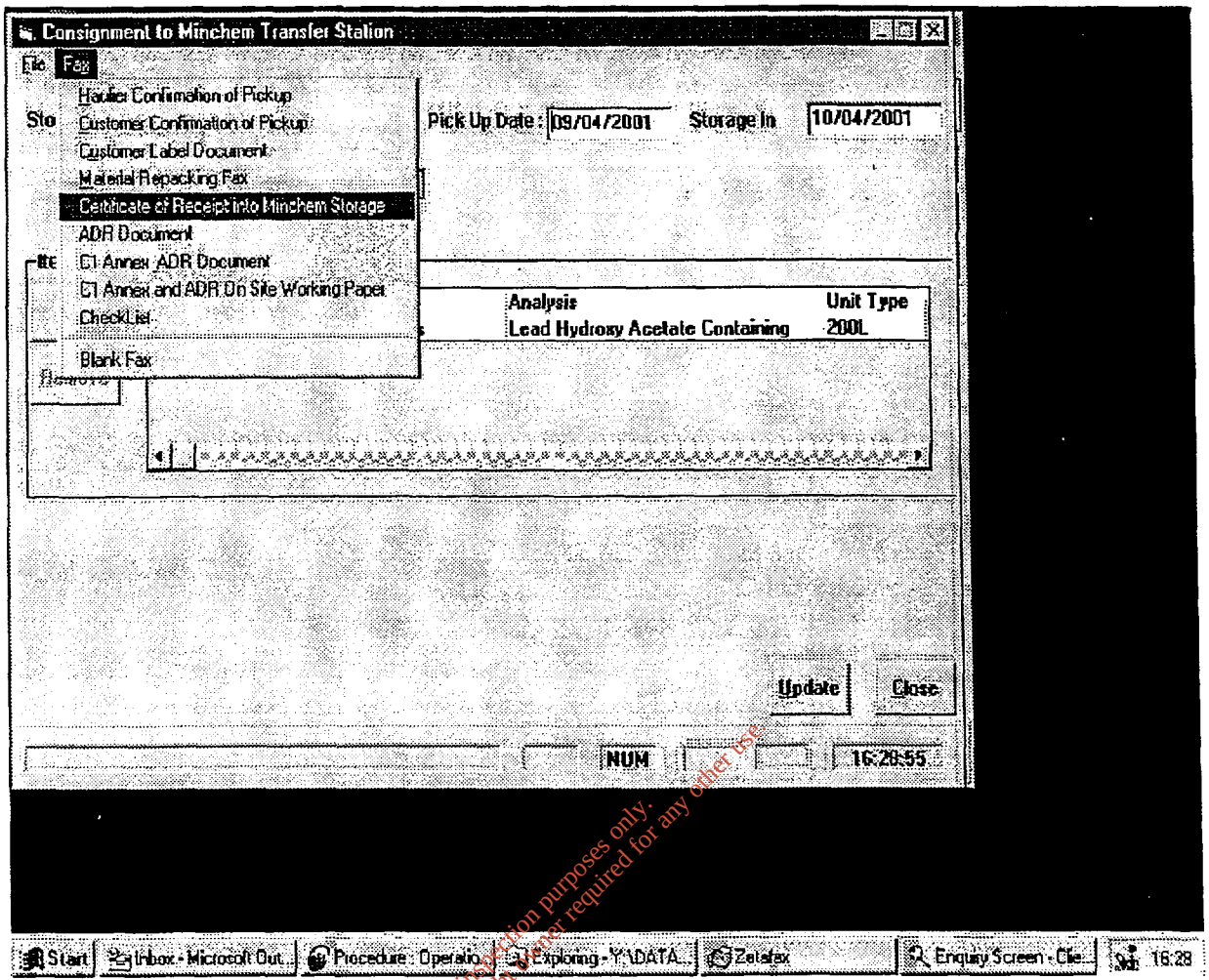
including address, telephone number, fax number, contact name)
- Chemical Name of Waste
- UN Number(s) of Waste, Class Number, Sub Risk and Proper Shipping Name
- Quantity
- Weight (metric tonnes)
- Container Type and size (Drum, Keg, Box, Bag, Tanker)
- EWC Number
- Storage In date
- Consignment note number (C1)
- Disposal/Recovery destination (A master list of all disposal/recovery site is kept on Tracker including address, telephone number, fax number, contact name)
- Storage location
- Details of any non conforming packages
- Tick Empty Packages and/or Limited Quantities on the technical screed where applicable

Once these details have been verified the following steps must be taken to finally register the waste into storage on Tracker.

- Tick "Checked against C1" box on front screen
- Enter your initials from the "checked by" dropdown box on the front screen

Certificate of Receipt

A Certificate of Receipt of Waste must then be generated by the relevant customer support person from "Transport/Consignment/Cert of receipt into MinChem storage" on Tracker and sent to the customer



Time Limit

All material accepted into the transfer station should be placed in a bunded area by the end of business that day and a waste receipt checklist should be completed and the material registered onto Tracker within 1 working day of being received on site.

Processing C1

Within 5 days of receipt of the waste a copy of the completed C1 Form and annex will be sent to:

(i) The local authority in whose area the waste originates
(ii) Dublin Corporation

Change History:

Suggested Next Review Date: 16/09/2002

- End of Document -

A3.2 MINCHEM PROCEDURE: REPACKAGING OF WASTE

MinChem

PART OF THE INDAVER GROUP

Procedure: Repackaging of Waste

Reference	Status	Version	Owner
Operations_5.10	Authorised	2	Patricia McGrath

Type: Operations Manual Sub-Type: Waste Handling

1. Purpose

The purpose of this procedure is to ensure that all repacking activities including redrumming, crosspumping, overdrumming and venting of packaged waste, ie drums/IBCs (Intermediate Bulk Containers), is carried out in accordance with all Health and Safety and Environmental legislation.

2. Definition

3. Responsibilities

It is the responsibility of MinChem's site operations team, site services team and sub-contractors to adhere to this procedure.

4. References

Repacking Checklist	Operations 5.10.1
Repack Room Health & Safety Check List	Operations 5.10.2
Inspection of Packages for Carrying Waste	Operations 5.3
Earthing	Operations 5.6
Selection of Labels	Operations 5.12

5. Procedure

Repacking at the Transfer Station

Site Operations Manger/Administrators - Office:

1. Refer to the Data Sheet on the material to be repackaged.
2. The Site Operations Manager (or if unavailable the Site Operations Administrator in consultation with the Helath & Safety Officer) will decide on the appropriate PPE depending on the substance being repacked. As a minimum the operators must be wearing, chemical resistant suit, anti-static safety boots, chemical resistant gloves and full face respirators.

Site Operations Assistants - Yard:

1. Set up working area - The area must be free of any sources of ignition, eg lighters, mobile phones.

2. The items to be repacked are brought to the repack room. This contains an activated carbon unit to absorb fugitive emissions. The Carbon Unit must be switched on before entry to the repack room.
3. The working area must be secured off - Hazard warning signs must be placed in the area to advise of work in progress. This is to stop personnel coming close to the working area that may have a flammable and/or toxic atmosphere. The shutters must be pulled down during the duration of the work.
4. The key for the shutter must be left in the control box while the repacking is being carried out. This is to ensure that in the event of any difficulty the shutter can be opened from the outside.
5. There must be at least two operators trained in chemical handling present when repacking is being carried out.
6. A fire extinguisher and spill kit must be present when the repacking is being carried out.

Prior to commencing work the Repack Room Health & Safety Check List Operations 5.10.2 must be completed by a third party (not involved in carrying out the work).

For all repacking at the Transfer Station a Repacking Checklist (Operations 5.10.1) must be completed and returned with the original check in list to the relevant customer support person. The customer support person must then contact the customer with the details of the repacking.

For Repacking off-site

1. Refer to the instructions to work and the data sheet on the material to be repacked.
2. The working area must be setup. The area must be free from any sources of ignition, e.g. lighters, mobile phones.
3. The working area must be secured off - Hazard warning signs must be placed in the area to advise of work in progress.
4. There must be at least two chemically trained operators present when repacking is being carried out.
5. The operators must be wearing the appropriate PPE. The required PPE will be listed on the instructions to work. As a minimum the operators must be wearing, chemical resistant suit, anti-static safety boots, chemical resistant gloves and full face respirators.
6. A fire extinguisher and spill kit should be present when repacking is being carried out.

Liquids to be Crosspumped

- UN Approved Tighthead Steel drums to be used for flammable, toxic material. UN Approved Tighthead Plastic Drums/ IBCs to be used for corrosive material.
- Check condition of the package as per procedure for the inspection of packages for carrying waste Operations 5.3
- Open liquid inlet cap and breather cap to allow ventilation during filling.
- An EX rated electrical pump or chemical resistant air operated double diaphragm pump and chemical resistant hoses must be used.
- Set up pump and place suction pipe into the container being emptied and the outlet hose into the drum/IBC container being filled.
- For steel containers, earth the container being emptied to the designated earthing points, pump and container being filled using the earthing straps provided by MinChem. The generation of static charges should be avoided at all times. (See Procedure for Earthing Operations 5.6)

- Start pump by supplying compressed air or electricity depending on type used. The initial filling should be slow until the nozzle of the outlet pipe is covered. Lower hose to bottom of container to avoid splashing of material.
- Place the suction pipe down to the bottom of the container and empty the liquid. If solids are present, place the suction pipe to within approximately 2 inches of the solids and pump. Where possible tilt the container to ensure complete liquid removal, taking care to avoid the removal of solids.
- Once the container is empty, replace the cap and make arrangements to place the empty container into storage. Drums/IBCs should not be filled more than approximately 90% capacity by visual inspection.
- Replace the caps on the filled drum/IBC and label it by following the procedure for selection of labels (Operations 5.12.)
- Repeat above steps to complete the work specified under the work instructions.
- The pump must be thoroughly washed and left ready for next use. Washings should be approriately packaged and labelled.
- Move repacked material (and washing where applicable) to designated storage area.

Solid Material to be Redrummed

- UN Approved Steel Packages to be used for flammable, toxic material. UN Approved Plastic Packages to be used for corrosive material. (Check for compatibility)
- Check condition of the package as per procedure for the inspection of packages for carrying waste Operations 5.3
- Open lid and place liner inside package/FIBC and shroud the outside of package with the rest of the liner. This will keep the outside of the package/ FIBC free from contamination.
- Start transferring material either manually or mechanically using a drum tilting unit and funnel system.
- If the material is wet a 2" layer of dry inert absorbent should be placed on top of the packed material once the solid has settled.
- Unshroud package and place polythene in package.
- Close package and label according to UN Number and hazard class. Refer to the procedure for selection of labels (Operations 5.12.)
- Move to designated storage area.

Material to be Overdrummed

- UN Approved Steel Overdrums to be used for flammable, toxic material. UN Approved Plastic Overdrums to be used for corrosive material (solids only). (Check foc Compatibility)
- Check condition of the package as per procedure for the inspection of packages for carrying waste Operations 5.3

- Open lid of overdrum. Lift damaged/non UN Approved drum using a forklift and drum clamp and place inside overdrum.
- Replace the lid of the overdrum and label the drum according to UN Number and hazard class. Refer to the procedure for selection of labels (Operations 5.12.)
- Move drum to designated storage area.

Venting of Drums/IBC's

- Cover bung with spill mat to avoid escape of spray due to high pressure.
- Slowly open bung with spark proof drum key.
- When vapour begins to escape hold bung in place, without further turning of drum key, until pressure subsides.
- Examine contents of drum to identify problem e.g. overfilling, reaction occuring inside.
- Report cause to Site Operations Manager.

Change History:

Suggested Next Review Date: 07/12/2002

- End of Document -