


Environmental Aspects and Risk Assessments

 1 EHS	<h1 style="margin: 0;">DE LA RUE WESTHOUGHTON</h1>
<h2 style="margin: 0;">Environmental Aspects and Risk Assessments</h2>	

Environmental Aspects Rating Chart

	Frequency	Likelihood	Severity	Regulated	Controllable
	How often could the impact occur?	What is the probability that an impact will occur?	To what degree would the impact effect the environment?	What degree of regulation is in place?	To what extent can the impact be controlled or influenced?
	1	2	3	4	5
1	Rarely (once in six monthly period)	Improbable	Not likely to effect	Not regulated	Easily controlled or influenced. Requires few resources
2	Intermittently (More than once in six monthly period)	Remote	Minor Easily correctable, short term, easily clearable	Voluntary	Requires some resources to address
3	Regularly (once per week)	Moderate	Moderate Correctable	Company Policy	Requires moderate resources to address
4	Often (once per day)	Likely	Serious More difficult to correct, recoverable	Potential to become regulated in the future	Difficult to control or influence, requires many resources
5	Repeatedly (happening again and again, daily)	Very likely	Severe Complex effect with complicated solution and great effort to correct and recover	Regulated Permitted but controlled by specific legislation or regulations	Very difficult to control or influence, requires extensive resources

LOW
MED
HIGH

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Engineering			
Aspect	Process	Significance / score	Assessment Completed
ASP01 - Use of Hydraulic Oils, Lubricants, etc.	Engineering Shop \ Planned maintenance	De La Rue Custom Assessment: LOW	July 2017
ASP02 - Risk of Spill of Hazardous, Restricted or Special Substances	Contractors \ Disposal of Chemicals	De La Rue Custom Assessment: MED	July 2017
ASP03 - Emission of Flue Gases/Heat	Production support \ Oil fuel Bolier for Uteco 1 & 2	De La Rue Custom Assessment: LOW	July 2017

Offices			
Aspect	Process	Significance	Assessment Completed
ASP04 - Generation of Office Waste	Offices \ HR	De La Rue Custom Assessment: LOW	July 2017
ASP05- Generation of Office Waste	Offices \ General Office	De La Rue Custom Assessment: LOW	July 2017
ASP06 - Energy use Both lighting and Office equipment are the main source of consumption. This could be utilised better. Certain Offices are air conditioned as well as centrally heated. Both lighting and Office equipment (computers, printers, photocopier) are the main source of consumption. Most computer equipment is energy efficient, although this could be utilised better.	Offices \ General Office	De La Rue Custom Assessment: LOW	July 2017
ASP07 - Use of Office Materials Paper and general stationery equipment Packaging of customers products is a main source of resource usage.	Offices \ General Office	De La Rue Custom Assessment: LOW	July 2017

Production			
Aspect	Process	Significance	Assessment Completed
			July 2017

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<p>ASP08 - Disposal of Hazardous, Restricted or Special Substances D2 Solvent soaked rags are disposed of in flame proof bins. The rags are collected and recycled by washing</p>	<p>Uteco 1 & 2 Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP09 - Storage of Chemicals/Hazardous Materials Storage of hazardous materials in this area include Sodium Hydroxide (160 kg) and small quantities of (MEK Based) Flexo Inks.</p>	<p>Uteco 1 & 2 Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP10 - Emission of VOC's The main emission to air comprises of combustion gases from the gas fired drying tunnels. Emissions for the process currently extracted via the Thermal oxidiser.</p>	<p>Uteco 1 & 2 Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP11 - Risk of Spill of Hazardous, Restricted or Special Substances Spill kits are available in the De-Met area, and a number of employees are trained to deal with spills.</p>	<p>Uteco 1 & 2 Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP12 - Emission of odour from the process Emissions for the process are not currently extracted via the oxidiser and are extracted out via a vent at the side of the building to atmosphere. Acetic acid type odours are sometimes detectable at the site boundary and inside the buildings.</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Low/Med</p>	<p>July 2016</p>
<p>ASP13 - Use of Water from Municipal Sources Water is used as part of the De-Met process, to wash off caustic acid from the coated holographic films.</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>

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<p>ASP14 - Controlled Discharge of Treated Effluent to Water Course</p> <p>A discharge of acetic acid, caustic soda and wash water is discharged to foul sewer. Monitoring of the level of condition of pH discharged is measured by a pH meter, and is consented to be between 6-10 pH.</p> <p>The process uses some fresh and some recycled water to wash the holographic web</p> <p>Operational controls exist.</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Med</p>	<p>July 2017</p>
<p>ASP15- Production Waste</p> <p>Production process leading to generation of waste.</p> <p>Chemical containers are returned to manufacturer.</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP16 - Generation of Soiled rags</p> <p>Solvent soaked rags are disposed of as special waste</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Low</p>	<p>July 2017</p>
<p>ASP17 - Storage of Chemicals/Hazardous Materials</p> <p>Storage of Hazardous materials is local to the process.</p> <p>Wash water is contained in a stainless steel bunded tank.</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Med</p>	<p>July 2017</p>
<p>ASP18 - Use of Acidic Chemicals</p> <p>Acetic Acid 80% strength is used as part of the Demetalizing process. Usage is about 30kg per day</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Low</p>	<p>July 2017</p>
<p>ASP19 - Use of Basic Chemicals</p> <p>Sodium Hydroxide (32%) is used as a neutralizing agent as part of the demetalizing process. Daily usage is about 50kg</p>	<p>Uteco 1 & 2 Indirect Etch</p>	<p>De La Rue Custom Assessment: Med</p>	<p>July 2017</p>

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ASP20 - General Energy Use	Uteco 1 & 2 Indirect Etch	De La Rue Custom Assessment: MED	July 2017
ASP21 - Risk of Fire or Explosion Caution should be exercised with regard to potential exothermic reactions.	Uteco 1 & 2 Indirect Etch	De La Rue Custom Assessment: LOW	July 2017
ASP22 Use of Packaging Material The use of Packaging (Cardboard, cellophane and Pallets) is a large use of resource.	Packaging \ Packaging of Product	De La Rue Custom Assessment: LOW	July 2017
ASP23 Risk of Fire from Shredder Fire from in Granulator.	Waste Management \ Operation of Granulator	De La Rue Custom Assessment: Low	July 2017
ASP24 Disposal to granulator	Waste Management \ Operation of Granulator	De La Rue Custom Assessment: Low	July 2017
ASP25 short term storage of process waste Waste Empty chemical containers are disposed of via special waste. Some chemical containers are returned to suppliers/manufacturers	Uteco \ Adhesive Coating and Gravure printing	De La Rue Custom Assessment: Low	July 2017
ASP26 Emission of Process Gases/Heat within the Process	Uteco \ Adhesive Coating and Gravure printing	De La Rue Custom Assessment: Low	July 2017
ASP27 Emission of VOC's The process solvent emissions from the print machines machine are oxidised in the thermal oxidising unit. The critical parameters of the process are monitored. IN THE EVENT OF AN OXIDISIER FAILURE	All print machines Adhesive Coating and Gravure printing	De La Rue Custom Assessment: MED This is now due to a second backup Oxidsier which run independent of each other	July 2017
ASP28 Smell/ Odours	Uteco \ Adhesive Coating and	De La Rue Custom Assessment: Med	July 2017

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	Gravure printing		
ASP29 - Use of Solvents in Product Manufacture Solvent use for the site is calculated at 80-100 tonnes per year. It is likely that a significant proportion of this figure has been used in these processes. This is split between dilution and cleaning which eventually end up as waste.	Uteco \ Adhesive Coating and Gravure printing	De La Rue Custom Assessment: MED	July 2017
ASP30 - Risk of Fire or Explosion from Static build up Build up of localised fugitive solvent vapour and sudden static discharge has potential for catastrophic explosion/fire.	Uteco \ Adhesive Coating and Gravure printing	De La Rue Custom Assessment: High Action completed to reduce risk	July 2017
ASP31 - Use of Natural Gas from dryers Gas is also used to power the drying tunnels on the Delpro.	Uteco 1 & 2 Adhesive Coating and Gravure printing	De La Rue Custom Assessment: LOW	July 2017
ASP32 Production Waste Waste product may be identified at this point (polypropylene film), rejected and disposed of via the shredder/briquetter to landfill/incineration	Uteco 1 & 2 Adhesive Coating and Gravure printing	De La Rue Custom Assessment: MED	July 2017
ASP33 Energy Use All machines are likely to have a significant electrical usage for motor drives. No individual process energy monitoring is carried out.	Uteco 1 & 2 Adhesive Coating and Gravure printing	De La Rue Custom Assessment: MED	July 2017
ASP34 Storage of Chemicals/Hazardous Materials Storage of both solvent and water based adhesives is via 205 and 25 Litre drums local to the production area. Smaller quantities	Uteco 1 & 2 Charging/filling of chemicals	De La Rue Custom Assessment: MED	July 2017

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of chemicals are held in local flam stores			
ASP35 Solvent vapours and fugitive emissions Fugitive emissions in the Uteco machine areas are evident from the mixing unit, printing heads and open drums/containers, Open hood whilst working, Drums left to dry out solvent	Uteco 1 & 2 Charging/filling of chemicals	De La Rue Custom Assessment: MED	July 2017
ASP36 Risk of Spill of Hazardous, Restricted or Special Substances Small scale spill containment is available in the area.	Uteco 1 & 2 Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP37 Use of Solvents for Cleaning Clean down solvents and waste adhesives are produced from the processes which are disposed of to landfill or incinerated. Only solvent waste is reported/monitored.	Uteco 1 & 2 Machine cleaning	De La Rue Custom Assessment: MED	July 2017
ASP38 Production Waste Solvent soaked cleaning rags are held in lidded drums and disposed of as special waste	Uteco 1 & 2 Machine cleaning	De La Rue Custom Assessment: low	July 2017
ASP39- Use of Raw Material (Hazardous, Special or Restricted) Euro sensitive	Kampf \ macro slitting	De La Rue Custom Assessment: low	July 2017
ASP40 Disposal to Incineration Witness of destruction	Kampf \ macro slitting	De La Rue Custom Assessment: med	July 2017
ASP41 Use of Electricity from Mixed Sources Electricity to power machine	Kampf \ macro slitting	De La Rue Custom Assessment: LOW	July 2017
ASP42 Use of Raw Material	Kampf \ machine set up	De La Rue Custom Assessment: low	July 2017
ASP43 Risk of Spillage, Leakage, or Uncontrolled Discharge	Mixing Area \ Caustic decant	De La Rue Custom Assessment: LOW	July 2017

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ASP44 Use of Solvents for Cleaning Clean down solvents and waste adhesives are produced from the processes which are disposed of to landfill or incinerated. Only solvent waste is reported/monitored.	DCM \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP45 Production Waste Solvent soaked cleaning rags are held in lidded drums and disposed of as special waste	DCM \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP46 Use of Solvents for Cleaning Clean down solvents and waste adhesives are produced from the processes which are disposed of to landfill or incinerated. Only solvent waste is reported/monitored.	CDP \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP47 Production Waste Solvent soaked cleaning rags are held in lidded drums and disposed of as special waste	CDP \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP48 Use of Solvents for Cleaning Clean down solvents and waste adhesives are produced from the processes which are disposed of to landfill or incinerated. Only solvent waste is reported/monitored.	EBERLIN \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP49- Production Waste Solvent soaked cleaning rags are held in lidded drums and disposed of as special waste	EBERLIN \ Machine cleaning	De La Rue Custom Assessment: LOW	July 2017
ASP 50-57 WERE ALLOCATED TO CHAMBON BUT IT WAS DECOMMISSIONED IN DEC 06			July 2017

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<p>ASP58 - Disposal of Hazardous, Restricted or Special Substances D2 Solvent soaked rags are disposed of in flame proof bins. The rags are collected and recycled by washing</p>	<p>DCM \ Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP59 - Storage of Chemicals/Hazardous Materials Storage of hazardous materials in this area include Sodium Hydroxide (160 kg) and small quantities of (MEK Based) Flexo Inks.</p>	<p>DCM \ Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP60 - Emission of VOC's The main emission to air comprises of combustion gases from the gas fired drying tunnels. Emissions for the process currently extracted via the Thermal oxidiser.</p>	<p>DCM \ Flexo Print head</p>	<p>De La Rue Custom Assessment: Med</p>	<p>July 2017</p>
<p>ASP61 - Risk of Spill of Hazardous, Restricted or Special Substances Spill kits are available in the De-Met area, and a number of employees are trained to deal with spills.</p>	<p>DCM \ Flexo Print head</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>
<p>ASP62 - Risk of Spillage, Leakage, or Uncontrolled Discharge from movement of chemicals Any hazardous substance spill entering the surface water drainage system would have the potential for ground and ultimately ground water contamination. The special waste drums are stored in proximity of the surface water drain, any loss of containment would result in contamination of the surface water drainage system which</p>	<p>Printroom storage area \ Storage of Materials for task</p>	<p>De La Rue Custom Assessment: LOW</p>	<p>July 2017</p>

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leads to large soakaways.			
ASP63 - Suppliers Packaging Waste Other wastes arise from pallets and packaging from suppliers	Printroom storage area \ Storage of Materials for task	De La Rue Custom Assessment: LOW	July 2017
ASP64- Storage of Chemicals/Hazardous Materials Storage of both solvent and water based adhesives is via 205 and 25 Litre drums local to the production area. Smaller quantities of chemicals are held in local flam stores	DCM \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP65 - Solvent vapours and fugitive emissions Fugitive emissions in the machine areas are evident from the mixing unit, printing heads and open drums/containers, Open hood whilst working, Drums left to dry out solvent	DCM \ Charging/ filling of chemicals	De La Rue Custom Assessment: HIGH Action completed to reduce risk	July 2017
ASP66 - Risk of Spill of Hazardous, Restricted or Special Substances Small scale spill containment is available in the area.	DCM \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP67 - Storage of Chemicals/Hazardous Materials Storage of both solvent and water based adhesives is via 205 and 25 Litre drums local to the production area. Smaller quantities of chemicals are held in local flam stores	EBERLIN \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP68 - Solvent vapours and fugitive emissions Fugitive emissions in the machine areas are evident from the mixing unit, printing heads and open drums/containers, Open hood whilst	EBERLIN \ Charging/ filling of chemicals	De La Rue Custom Assessment: HIGH Action completed to reduce risk	July 2017

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working, Drums left to dry out solvent			
ASP69 - Risk of Spill of Hazardous, Restricted or Special Substances Small scale spill containment is available in the area.	EBERLIN \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP70 - Storage of Chemicals/Hazardous Materials Storage of both solvent and water based adhesives is via 205 and 25 Litre drums local to the production area. Smaller quantities of chemicals are held in local flam stores	CDP \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP71- Solvent vapours and fugitive emissions Fugitive emissions in the machine areas are evident from the mixing unit, printing heads and open drums/containers, Open hood whilst working, Drums left to dry out solvent	CDP \ Charging/ filling of chemicals	De La Rue Custom Assessment: HIGH Action completed to reduce risk	July 2017
ASP72- Risk of Spill of Hazardous, Restricted or Special Substances Small scale spill containment is available in the area.	CDP \ Charging/filling of chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP73 - Risk of Spill of Hazardous, Restricted or Special Substances	Waste Management \ Disposal of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP74 - Use of Raw Material	Printroom storage area \ Use if Raw Materials for production	De La Rue Custom Assessment: LOW	July 2017

<i>Aspect</i>	<i>Process</i>	<i>Significance</i>	July 2017
ASP75 - Risk of Spillage, Leakage, or Uncontrolled Discharge	Goods Inward and Despatch \ Chemical Delivery	De La Rue Custom Assessment: LOW	July 2017
ASP76- Suppliers Packaging Waste Other wastes arise from	Goods Inward and Despatch \ Raw Material Delivery	De La Rue Custom Assessment: LOW	July 2017

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pallets and packaging from suppliers			
ASP77 - Packaging waste Production process leading to generation of waste.	Goods Inward and Despatch \ Goods Receiving Inspection	De La Rue Custom Assessment: LOW	July 2017
ASP78 - Risk of Spillage, Leakage, or Uncontrolled Discharge from forklift movements	Ink Stores \ Movement/ Booking In/Out Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP79 - Movements of Chemicals/Hazardous Materials Hazardous materials – delivery and transportation to and around site	Ink Stores \ Movement/ Booking In/Out Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP80 - Risk of Spillage, Leakage, or Uncontrolled Discharge from movement of chemicals Any hazardous substance spill entering the surface water drainage system would have the potential for ground and ultimately ground water contamination. The special waste drums are stored in proximity of the surface water drain, any loss of containment would result in contamination of the surface water drainage system which leads to large soakaways.	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP81 - Charging of Solvents Decanting of chemicals occurs in the solvent store.	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP82 - Storage of Chemicals/Hazardous Materials Drums are stored in	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017

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Empteezy stores, or held in the Ink stores			
Hazardous Materials are checked for stock taking purposes on a monthly and six monthly basis.			
ASP83 - Lack of segregation in Storage of Chemicals/Hazardous Materials The raw material chemical storage area is used for all liquid chemicals. Although segregation of Corrosive and Flammable liquids is required, a segregation policy for incompatible materials is not currently practical.	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP83 Risk of Fire or Explosion from Static build up Build up of localised fugitive solvent vapour and sudden static discharge has potential for catastrophic explosion/fire. Purpose built solvent storage area	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: MED	July 2017
ASP84 Fugitive Emission of VOC's	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP85 Disposal of Chemical packaging	Ink Stores \ Storage of Chemicals	De La Rue Custom Assessment: LOW	July 2017
ASP86 Storage of Restricted or Special Waste The special waste is stored in the Empteezy stores. Special Waste sent for disposal or recovery.	Yard Activities \ Storage of Waste	De La Rue Custom Assessment: LOW	July 2017
ASP87 Risk of Spillage, Leakage, or Uncontrolled Discharge	Yard Activities \ Chemical Delivery	De La Rue Custom Assessment: LOW	July 2017

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ASP88 Storage of Restricted or Special Waste The special waste is stored in the Bunded stores. Special Waste sent for disposal or recovery.	Suppliers \ Storage of Waste	De La Rue Custom Assessment: LOW	July 2017
ASP89 suppliers Packaging Waste Other wastes arise from pallets and packaging from suppliers	Suppliers \ Raw Material Delivery	De La Rue Custom Assessment: LOW	July 2017
ASP90 Use of cleaning unit use of chemicals disposal of waste liquids(Solvent Content)	Washing unit/charging emptying	De La Rue Custom Assessment Med	July 2017
ASP91 Energy Consumption	Washing Unit	De La Rue Custom Assessment MED	July 2017
ASP92 Water Consumption	Washing unit	De La Rue Custom Assessment Low	July 2017
ASP 93 Corona Treatment New Uteco 2	Operation process	De La Rue Custom Assessment Med	July 2017
			July 2017
			July 2017
			July 2017
			July 2017
			July 2017
			July 2017
Holographics areas			July 2017
			July 2017
Embossing			July 2017
			July 2017
ASP 94 Use of hot oil in the process	Operation Process	De La Rue Custom Assessment Low	July 2017
			July 2017
ASP 95 Use of solvents for cleaning in the process	Operation Process	De La Rue Custom Assessment Low	July 2017
			July 2017
ASP 96 Hazardous waste produced from process	Operation Process	De La Rue Custom Assessment Low	July 2017
			July 2017
Plating			July 2017
ASP 97 Use of various different chemicals in the plating process	Operation Process	De La Rue Custom Assessment Low	July 2017
			July 2017
ASP 98 Plating tanks overfill or leak into room, Room has a	Operation Process	De La Rue Custom Assessment Low	July 2017

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sump and spill kits on all doors.			
ASP 99 Risk of Spill of Hazardous, Restricted or Special Substances Small scale spill containment is available in the area.	Operation Process	De La Rue Custom Assessment Low	July 2017
New solvent system			July 2017
Outside storage tanks			July 2017 July 2017
ASP 95 Overfill of external solvent storage tank	Operation Process	De La Rue Custom Assessment Low	
ASP 96 Spillage of solvent when filling tanks from road tanker	Operation Process	De La Rue Custom Assessment Med	July 2017 July 2017
ASP 97 Fire / explosion from static related fire	Operation Process	De La Rue Custom Assessment Med	July 2017
ASP 98 Tanks failing due to corrosion	Operation Process	De La Rue Custom Assessment Low	July 2017