

Case Study

# Setting the standard

Northern Ireland facility reaps the benefits of its management systems.



Re-Gen's Newry MRF

**Family-owned waste management company Re-Gen Ltd runs the Materials Recovery Facility (MRF) in Newry, County Down. Commissioned in September 2004, the plant processes 70,000 tonnes of co-mingled household recyclates annually from local authorities in Northern Ireland, the Irish Republic and mainland UK.**

**The problem**

When planning the new facility, the Managing Director, Joseph Doherty, realised that adopting the environmental management system ISO 14001 would help him win customers and streamline his operation. Even introducing just one accredited management system requires a lot of work, but Mr Doherty decided at the same time to implement two additional standards governing quality management (ISO 9001) and safety (OHSAS 18001). (See the Background box for an introduction to accredited management systems.)  
 "Local councils placing waste management tenders put a high score on applicants with these accreditations, so it made commercial sense to go for all three of them," he says. "We wanted to get a step up the ladder – and didn't mind a challenge!"

**Re-Gen MRF – key facts**

- Operator: Re-Gen Ltd
- Commissioned: 2004
- Capacity: 140,000 tonnes per annum
- Tonnage processed: 70,000 tonnes (2008)
- Recovery rate: 92% (2008)
- Employees: 80
- Inputs: Co-mingled. No commercial organisations currently served.
- Outputs: News and PAMs, mixed paper, OCC, mixed plastic bottles, plastic film from bag collections, steel, and aluminium
- Not accepted: Glass, textiles, mixed plastics



Co-mingled recyclates from a local authority are tipped at the Re-Gen MRF



**Cardboard separation screen**

### The solution

Re-Gen received funding from Invest Northern Ireland, the Province's economic development agency, and hired ISO expert Jonathan Acheson to co-ordinate the implementation process. He recalls that putting in the management systems prior to commissioning the plant was tricky: "We had to guess what would be the likely environmental impacts. For example, we thought the MRF might release nasty odours but it turned out not to be a problem."

On the other hand, given the nature of its business, Re-Gen was well placed to implement these standards – particularly ISO 14001. "Helping Re-Gen to obtain the accreditation was more straightforward than normal," says Mr Acheson, "because many environmental issues were already addressed in the site's waste management licence."

Re-Gen was also in the fortunate position of being able to design a MRF with minimal environmental impacts. For example, the MRF was enclosed in a purpose-built shed protecting output materials from wet weather and reducing the negative effects of smell, noise, dust and vibrations. The firm also installed interceptors around fuel storage areas to filter oil from run-off water before it enters drains.

Everyone from pickers to senior management underwent training in the standards. "Buy-in at board-room level was especially crucial," says Mr Doherty. "We took the decision that if we were going to go for certification then we would need to do things properly. The standards had to be intertwined with our business. All our picking staff were trained to NVQ Level 2 in environment, health and safety and quality awareness." The training only took one day per person and fitted well

with the existing administration of Re-Gen's business.

### The results

The ISO accreditations have already helped Re-Gen win new business. Mr Doherty estimates that the standards have enabled the MRF to attract up to 40% of the feedstock it is currently processing. Without the standards, the MRF would now be running significantly under capacity.

Gaining accreditation has also boosted sales of output materials. "In the current economic downturn, reprocessors are increasingly choosy over whom they buy from. Our standards were crucial in winning us a number of new customers for our products," says Mr Doherty. "This is because our systematic checks on paper, plastic, aluminium and other materials give reprocessors confidence in the quality of the materials we are recovering."

This is confirmed by one of Re-Gen's key customers, the leading Dutch wastepaper processor Peute Papierrecycling. The company's International Business Manager, Jan van de Velde, says: "We have been dealing with Re-Gen for a couple of years, and think the company has a really professional attitude. We closely monitor the quality of all the paper we buy, and Re-Gen's product has been consistently good. The quality standards they have implemented have helped them achieve this."



**Plastic bottle sorting line**

Environmental impacts from the plant's operation are regularly checked, as are the – usually rare – incidences of hazardous or non-conforming inputs. A new system has been implemented whereby floor managers will photograph any consignments containing problem materials and email these to senior management together with the identity of the supplying local authority as recorded on the Waste Transfer Note. In turn the photos are passed onto the relevant local authority, and followed up with a phone call.

“Having ISO 14001 made compliance with relevant environmental legislation straightforward,” says Mr Doherty.

Although Re-Gen has now achieved accreditation, continual improvement is a feature of the management systems. The company recently introduced trailers with more capacity for recycle material, reducing both its carbon footprint and its fuel bills. In addition, systems for recycling used batteries, oil and oily rags from the truck maintenance area were implemented.

With the help of WRAP (Waste & Resources Action Programme) and the Oxford Quality Centre, the outputs quality sampling regime was also refined at Re-Gen. “Before these changes, we were checking our material quality by periodically splitting bales and sampling the contents,” says Mr Doherty, “but now we check for, and weigh, any non-conformities in our outputs before they’re baled. It’s a far more effective way to ensure quality because we’re sampling five times a day.”

Re-Gen use whiteboards to communicate to picking staff their performance in producing quality outputs.

For example on the News and PAMs line, boards show the percentages of unwanted materials such as cardboard, cans and bottles which are not being removed against target percentages for these non-conformities.

“Just do it,” is Mr Doherty’s advice to fellow MRF operators considering certification. He also stresses the importance of running the management systems in line with the MRF’s activities: “It’s a great management tool to check your own day-to-day processes.”



**News and PAMs grade paper sorted by Re-Gen’s Newry MRF**

### **Background: Quality management systems**

Re-Gen implemented three different standards at their plant: the environmental management system ISO 14001:2004, the quality management system ISO 9001:2000 (updated in 2008), and OHSAS 18001, the occupational health and safety management system.

The ISO standards are just two of many developed and co-ordinated by the Swiss-based International Organization for Standardization. While most standards are specific to a particular product, material or process, ISO 9001 and ISO 14001 are generic and applicable to any type and size of organization. The OHSAS standard is co-ordinated by the Occupational Health and Safety Advisory Services, a UK body providing expertise in a comprehensive range of occupational health and safety skills.

In order to achieve – and maintain – the standard, a company needs to satisfy an assessment body, itself requiring approval by UKAS (the United Kingdom Accreditation Service). Depending on the size of the organisation, the assessor will visit one or more times a year. Each assessment consists of one day checking that all the documentation pertaining to the management system is in place, followed by two further days checking that the systems in operation back up what is stated in the paperwork.

Continuous improvement is vital for retaining standards. “The aspects register, controlled by a management programme, is the hub of ISO 14001,” says consultant Jonathan Acheson. “This assesses the risk and severity of every potential environmental impact of the MRF. Every year the company must demonstrate that it has set – and met – objectives to address the most significant impacts. These objectives have to be achievable rather than overly ambitious. Ultimately, the company just has to show that measures are in place and improvements have occurred.”

Mr Acheson believes accreditation not only improves the performance, environmental and otherwise, of the MRF but also confers a better image: “The standards will have enhanced Re-Gen’s reputation among existing and future customers.”

WRAP has developed three templates for MRFs to help build their quality management systems which are available on the WRAP website.



The Re-Gen MRF in Newry is enclosed to reduce its environmental impacts

### Abbreviations

- ISO: International Organization for Standardization
- MRF: Materials Recovery Facility
- News and PAMs: Newsprint, Periodicals and Magazines
- OCC: Old Corrugated Cardboard
- OHSAS: Occupational Health and Safety Advisory Services
- UKAS: United Kingdom Accreditation Service

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