



OVERVIEW

Cummins is a global leader in the design and manufacture of diesel engines. Their Darlington engine plant prepares heavy duty engines for global distribution. The company is committed to:

- Reducing the volume of wood waste leaving the site in wood skips.
- Reducing the on-going cost of wood waste generated.
- Identifying environmentally preferable solutions for used pallets and wooden packaging to comply with the waste hierarchy.



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CHALLENGE

Cummins in Darlington (DEP) imports engine blocks from their USA sister companies. The engine blocks are supplied on specially made wooden pallets including supportive components that are all considered wood waste after use.

Cummins formerly deposited and crushed the used US pallets, including other unwanted wooden packaging, in a 40 yard skip. The crushed mixed wood waste was then recycled, however the disposal costs escalated with up to 3 skips emptied per week.

Although operating to a very commendable environmental practise Cummins DEP sought further improvements in handling their wood waste to help achieve a more sustainable and cost effective solution.

SOLUTION

The first challenge for RPS was to reduce costs associated with wood waste disposal including the single biggest contributor, the skip charges. RPS introduced a standing trailer on site to store discarded pallets. When full, the trailer was sent to be locally chipped into suitable biomass fuel. This process of collecting unwanted pallets measurably reduced costs by over 50% compared to disposal in wood skips. Full analysis is published to Cummins every month, including quantities and weights of wood waste removed from the site.

After further evaluation a decision was taken to test the economics of returning for reuse the imported US pallets to their two sister companies in North Carolina (RMEP) and Illinois (CMEP). Detailed load planning, using high cube ISO Containers and RPS expertise in logistics management enabled each returning container to ship over 600 packaging components back to the USA. The net benefit to the Cummins business is a 15% reduction in packaging costs compared to buying new. RPS now returns on average 25 shipments annually to the American engine plants.

In addition to the savings generated through returns, RPS identified value in other unwanted but reusable pallets generated at the DEP site. Competitive rebates provided DEP with a new source of income that could potentially contribute towards any remaining disposal charges.

The whole waste wood project enabled the Cummins business to measurably reduce disposal costs, noticeably benefit from lower pallet spends and demonstrate improvements in environmental performance. The continual improvements implemented rewarded the site with a Chairman's Environmental Award for the reduction of packaging waste.



CLIENT TESTIMONIAL

"RPS provided the industry expertise and knowledge to facilitate a complicated packaging return process from the UK back to the USA. RPS's knowledge in relation to the inspection and refurbishing of used packaging as well as their logistics expertise has been invaluable in both setting up and maintaining the returns process. As well as the environmental benefits we have seen a cost saving both in terms of recycling costs in the UK but also cost avoidance from purchasing virgin packaging in the USA."

NS, HSE Manager

RESULTS

- Annually return in excess of **15,000 pallets** and other wooden packaging to the US.
- **Reduced** Cummins RMEP & CMEP packaging spend by 15%.
- Measurably reduced disposal charges by **diverting 500te** of wood waste from recycle to reuse.
- Published detailed **monthly reports** quantifying levels of wood waste and collected pallet volumes.