LOCATION, LOCATION, LOCATION

Recycle One clears the way for the nation's center to produce more paperwork.

Within the hundreds of thousands of Washington D.C.'s governmental offices, as legislators and bureaucrats discuss the business of the United States, assistants create paper documents—many of which are ultimately thrown in trash cans, which, during the night, are dumped into dumpsters and ultimately brought to the nearby transfer station of Recycle One.

As old buildings are remodeled and new buildings and offices are created, all of the construction debris must go somewhere… and the closest place to get it dumped for sorting and recycling, is the transfer station of Recycle One, just a few miles from Capitol Center.

"WE'RE THE MOST CONVENIENT"

"We're permitted to receive both C&D (Construction and Demolition Waste) and MSW (Municipal Solid Waste) materials here at our facility," says David Valdez, Division Manager. "Our very convenient location allows our customers, private and government customers, to make fast cycles."

"And that makes for one amazingly complex logistical effort," chuckles Frank Carter, Team Transport General Manager. "We have a small footprint and a constant flow of trucks dumping their loads. We're receiving around 900 tons of material a day, with about the same going out, sorted and processed to a number of landfills and recycling centers each day."

The company was originally permitted for C&D waste and built to handle the targeted flow of around 350 tons of construction waste a day. But, C&D material is uncertain because it is based on the volume of construction going on in downtown DC. On the other hand, MSW material is nearly constant.

"Our regulatory folks have two separate rules for each," notes Valdez. "MSW material has the potential of a lot more environmental impact than the other. MSW is both residential and commercial trash, including restaurants and grocery stores, so there's a lot more opportunity for problems. It requires a higher level of simply being at the top of your game."

The good part of receiving the municipal solid waste from surrounding neighborhoods is that it is better packed and the trucks are designed for quick disposal.

"Today, about 60% of what we take in is MSW," says Valdez. "As far as ticket time, the average roll-off of C&D is about three and a half tons, while the average MSW truck, which is designed to pack as it collects, is about eight tons. So, with MSW waste, we need about half the amount of trucks to get the same weight, which is really important for us because we have such a small footprint to operate on."

"We're receiving around 250 trucks a day," notes Carter. "And we're pushing out an average of 45 semi loads. We accept waste from 5 AM to 5 PM and process, then load for the landfills from 2 AM to 7 PM."

David Valdez, left with Frank Carter at the front of the company's processing building.

HOW IT GETS DONE

"We're receiving all of our material inside a 20,000 sq. ft. building," says Valdez, "so everything has to be well orchestrated, and we simply cannot afford to stop. We carefully direct multiple trucks to dump at the same time inside the building with one large loader quickly pushing the material either directly from the front to the back to our single loading area, or to multiple piles for segregating for recycling and shipment by separate trucks. Some of these efforts might require us to temporarily move some of the material outside and out of the way."

"To ensure that we are never stopped by equipment breakdown, we have two loaders for pushing and two excavators for loading. We use both, one at a time, with our primary and newest equipment used from early morning to mid-day. Those machines are then walked out and our secondary equipment is walked in to finish the day. This allows us plenty of time to not only perform maintenance on both sets of equipment but to also perform any planned preventative care that we've thought necessary—in a planned and methodical manner."

MINIMAL EQUIPMENT IN THE BUILDING

"For the loaders," notes Valdez, "we have a smaller Kawasaki-KCM, a 45, with a grapple, which we use for sorting. And then, we have two Kawasaki-KCM 90Z7 loaders that we use to push material inside the building. One is a 90Z7 and the other is a brand new 90Z7 T4F.

Of course, we load with an excavator. We currently have a Cat 329 with a 5-over-4 grapple, which is probably the biggest trash grapple you can get. A Terex excavator of the same capacity backs up the Cat. "

"Our 90-sized Kawasaki-KCM loaders are a little larger than you'll find at competitive facilities but we're all about processing as much as possible in the shortest amount of time," David Valdez.

Trucks are constantly dumping into the small facility so it is important to keep the flow of material pushed to the back where it is loaded into transfer semi trailers.

Materials from demolitions are sorted for resale/reuse while municipal waste is simply moved to the back for transfer to area landfills.

Each truck is weighed coming and going as the facility charges by the weight of materials received.

SELECTING THE RIGHT LOADER

"Our approach is based on a multitude of things. We want a loader with the smallest footprint, with the highest pushing power, equipped with the largest bucket possible. We want the most visibility possible. And, we want both a great price and a dealer who cares about us," says Valdez.

The company has found the Kawasaki-KCM 90 sized model to work well. "The visibility is very good. Not only do we have trucks coming and going in close proximity, but we also have people walking around in the small work area," says Valdez. "We like the power and size of the 90. With about 100 tons an hour coming in, its 8.5 cu. yd. bucket and pushing power allows it to push everything down the 50-60 foot lanes quickly so that we can keep up."

"We've had a very good experience with Kawasaki-KCM wheel loaders," continues Valdez. "Our current two 90 loaders replace an 85 and 90 which we'd had for years and felt that around 25,000 hours, it was time to replace."

Loader comparisons were made partly because the company wanted to be clearly fair in their new loader selection, and partly because they are so visible in the middle of Washington D.C., loader comparisons were made. "We were eager to make the best decision possible, " says Valdez. They didn't want to make it a given that their next loaders would be Kawasaki-KCM. But, as they were going through their deliberations, one

of the old Kawasaki-KCM loaders had problems. And amazingly, their Kawasaki-KCM dealer, Elliott-Frantz, was able to come up with a rental that met their specifications, including solid tires.

Ultimately, the company bought the used rental on a Rental Purchase (RPO) basis with some adjustments for the type of High Visibility bucket that they liked. And to compliment that purchase, the company agreed to the purchase of a new 90 model.

"Our Elliott-Frantz salesman knew that we needed under guards, self lubrication, the High Visibility bucket, solid tires, and rear camera. Compared to the competition, with Kawasaki-KCM, I got more horsepower, greater pushing capacity for less money with a dealer that we've know for years. We're very happy with what Elliott-Frantz has been able to provide with service and parts."

Recycle One/WB Waste Solutions of Hyattsville, MD is serviced by Elliott-Frantz of Baltimore, MD.

90Z7 T4F SUMMARY

- **Engine Model:** Cummins QSL9 Diesel
- **Engine Net HP:** 272 HP/ 2000 RPM
- **Bucket Capacity:** 6.1 Cu. Yd w/Material Handling
- **Overall Length:** 9017 mm, 29'7"
- **Wheelbase:** 3429 mm, 11'3"
- **Hydraulic Lift Time:** 5.6 sec., loaded
- **Hydraulic Dump Time:** 1.2 sec
- **Hydraulic Lower Time:** 4.1 sec
- **Open Center Hydraulics:** Improved Response Simple, Tier 4 Final Emissions Control: SCR and DEF only. No DPF

"WE'VE HAD A VERY GOOD EXPERIENCE WITH KAWASAKI-KCM WHEEL LOADERS."

— DAVID VALDEZ, DIVISION MANAGER