Tri-County Metropolitan Transportation District (Tri-Met)
Portland, Oregon

Profile

Tri-Met is the state of Oregon's largest public transit agency, serving nearly 600 square miles in the urbanized portions of Multnomah, Washington and Clackamas counties. During its 30+ years as an agency, Tri-Met has seen ridership increase to its current record level of 80 million rides a year. By providing efficient transportation alternatives and taking cars off our roads, Tri-Met helps preserve the region's quality of life and keep the air clean and is recognized as one of America's Best Transit Systems.

Tri-Met is governed by a seven-member, volunteer board of directors who are appointed by the governor. Each board member represents a geographic area within the Tri-Met service boundaries. The Board sets policy direction for the agency. The general manager serves at the board's discretion and runs the agency, which employs 2,530 people.

Tri-Met operates the 33-mile MAX light rail line and 102 bus routes. In fall 2001, a 5.5-mile MAX extension will connect Portland International Airport to the regional light rail system. A 5.8-mile Interstate MAX proposal, includes 10 new stations between the Expo Center and Rose Quarter Transit Center, and would operate directly between the Expo Center and downtown Portland. Additionally, Tri-Met runs LIFT, door-to-door transportation for people with disabilities and others unable to ride the fixed-route system. The LIFT program provides nearly 15,000 rides a week.

Tri-Met's operating budget for FY2001 is $280.7 million. The majority of revenue, about 65 percent, is derived from payroll taxes. Passenger revenues cover about 19 percent. For more information see www.trimet.org

Fenceline

The fenceline for EMS establishment is Tri-Met's 5 maintenance facilities benefiting approximately 580 maintenance employees. Future plans include the maintenance of way department and purchasing/procurement departments.

Core Team

The core team is made up of three members of the EMS Steering Committee with the EMS project manager designated as the Environmental Management Representative. 7 employees from maintenance, maintenance of way, facilities management and safety departments make up the remainder of the EMS Core Team.

Key Drivers for Adopting and EMS

Tri-Met identified several critical factors that led to the decision to design and adopt an EMS within their 5 maintenance facilities. Tri-Met observed that the adoption of an EMS presented the potential to lead to regulatory benefits and enhanced relationships with regulators from EPA's Performance track to Oregon DEQ's Green Permits. After considering green building initiatives, LEED certification and Energy Star Buildings the EMS structure was seen as an ideal framework to transition easily into these programs and toward sustainability. Tri-Met also identified several internal drivers that offered similar benefits for the environment:

- Improved employee participation in the facility's environmental performance;
- Improved overall environmental performance;
- Improved facility compliance with environmental regulations; and an opportunity to use employee creativity to move beyond regulations.
- Increased support from environmental professionals including EPA, DOE, DEQ.
- Executive order from Governor mandating sustainable state offices by 2025.

Significant Aspects & Impacts

After looking at flow charts, internal surveys and processes within the maintenance facilities many environmental impacts were identified. Not all of these areas could be improved upon immediately given budget cycles, technological and human resources' constraints. Using criteria like severity, human health impacts, frequency of occurrence, natural resource depletion and regulations each impact was ranked. The impacts were scored using a weighting percentage with a numerical value to determine what would be considered to be significant. From this list of significance 12 objectives and targets were created.

Objectives and Targets

Objectives	Targets
Consume less water when washing vehicles; accurately measure efforts	10% monthly reduction in usage associated with washing
Improved industrial waste water discharges; evaluate engineering solutions	Estimated the use of methylene chloride at all facilities
Increased focus on spill prevention; training; safe rinse zones established	Improve drainage catch basins; zero industrial wastewater violations in 2001
Annual replacement of filter cartridges; investigate spray bottle alternatives	Facilities plant maintenance mechanic trained on filter preventative maintenance
Reduce solid waste impacts of activity, research potential substitutes, new paint bay designed	Investigate no/low VOC paints pros and cons; investigate low VOC paint guns.
Extend life of glass bead, minimize waste, train/engage employees in efficient use	Informal training by 4/27/01; permanent reminders using postings next to units
Creation of refrigerant management program	Audit training records; review 608/609 guidelines; evaluate potential remedies
Improved waste water treatment, reduce chemical usage, publicize pump schedule	RFP for wastewater equipment upgrades, monthly facility walkthroughs documented
Maintain existing compliance record; improve training; investigate low mercury tubes	Universal waste tracking updated monthly with improved internal procedures.
Increased internal reporting and training on Veeder-Route system	Annual training on tanks' alarms, monitoring equipment, emergency preparedness and response.
Increased recycling of used absorbents, recycling of paints	No changes in waste generator status of Tri-Met facilities.
Conservation of electricity, natural gas and water fees	10% usage reduction in 03/01 compared to 03/00

Benefits of Adopting an EMS

Tri-Met has realized a number of benefits resulting from the adoption of an EMS into their 5 maintenance facilities. The EMS has enabled them to

- Streamline communications concerning environmental practices. Better-defined roles and responsibilities allowing for more freedom to implement EMS procedures.
- Identification of areas where utility savings existed. $300,000 in operating savings identified as of June 2001. Of which $66,000 is directly attributable to in energy conservation objectives and targets.
- Allow employees the freedom to design their system to fit their needs rather than having to change operations to fit environmental regulations.
- Reduce Tri-Met's environmental footprint through more efficient operations.

- Envision a workplan for incorporating The Natural Step.
- Focus on continual improvement of maintenance, ridership and our EMS.

Resources

Personnel working on the development and implementation include the EMS Project Manager, two members of the EMS steering committee, the cross-agency core team (7 staff members) and occasional consultants. Top management is also involved with regular reviews. Although the EMS is not fully implemented based on total resources currently committed the total direct labor time will equal approximately 2765 hours. Based on this estimate the labor costs and consultants for the two-year project will equal approximately $103,968.

Next Steps

Tri-Met is committed to using the EMS and expanding the EMS fenceline to other parts of the agency over time. The EMS fenceline will next involve the purchasing and procurement departments in the core team and begin to engage contractors who perform work on-site. The next steps also involve exploring the requirements for Agency involvement in Oregon DEQ's Green Permits program and more closely aligning objectives and targets to the system conditions contained in The Natural Step in order to make progress toward a longer-term goal of making the Agency more sustainable.

Management Commitment

An Environmental Management System allows us to go beyond the minimums of local, state and federal compliance regulations and moves us towards sustainability.

- Fred Hansen, Tri-Met General Manager