

GENERALLY ACCEPTED MANAGEMENT PRACTICES FOR WATER EFFICIENCY AND CONSERVATION – PORTLAND CEMENT MANUFACTURING, WET PROCESS

The following lists contains generally accepted management practices (GAMPs) for improving water efficiency and water conservation for Wet Process Cement Manufacturing, with quarry operations (de-watering activities) on the contiguous site. Water conservation strategies that have already been implemented include:

- Reuse of CKD landfill leachate for CKD landfill dust-suppressant and process water, as allowed by permit.
- Use of Storm water and quarry dewatering for wet process mix.
- Use of Storm water and quarry dewatering for road watering and storage pile dust suppressant.

GAMPs:

Communication

- Incorporate water conservation policies and procedures into employee training programs.
- Post water-conservation stickers, signs, and posters in bathrooms, kitchens, cafeterias, conference rooms, and other places where employees congregate, to help raise awareness.
- Participate in water conservation advisory groups or similar organizations.

Process

- Maintain a general water use inventory for the facility and update annually or as needed following change management procedures.
- Consider the impact of future facility modifications or production changes on water usage. Changes to routine operations provide a good opportunity to evaluate current practices for possible water conservation opportunities.
- Shut off faucets and nozzles when not in use.
- Re-use waste process water for truck washing and dust suppressant.
- Dewatering of the quarry is required for efficient, economical and safe operation. Continue to optimize water use from this activity.
- Incorporate water conservation into ISO or other existing QA/QC processes.

Washrooms

- In new installations consider waterless urinals, which do not consume any water (eliminating water supply lines and flush valves), are easy to install and meet public health standards.

Landscaping

- Reduce or eliminate landscape watering.
- Install drip irrigation to reduce water use in landscaped areas.
- Use more drought-tolerant native vegetation.