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Tyler Gearhart, Director of Business Development
Clearwater Mills, LLC
4965 Mountain Road
Pasadena, MD 21122
(via Gearhart@ClearwaterMills.com)

Dear Mr. Gearhart;

As a Board Member of UMRA (the Upper Monongahela River Association) I received a copy of your Trash Wheel Site Plan and Trash Wheel Layout for Morgantown. I would like to offer you some personal comments on your potential project.

As a concept, it's fine, but as the saying goes, "the devil is in the details."

Site Issues

As I understand the plan, you propose to install a wheel on the upstream side of the Morgantown dam above the easternmost Tainter Gate. I believe that this is officially Gate #6.

Rye Development LLC has an active permit for construction of a hydro-power plant just downstream of the same gate. Both you and Rye may be planning on using some of the same space.

You are proposing a Dumpster Ramp at the site. Normal river pool elevation here is 814 feet and the Caperton Rail-Trail has an elevation of about 825 feet. The required lift is at least 10 feet and the horizontal distance is probably less than 25 feet. This makes for a tough dumpster movement. This would have to cross the trail, and would meet with fierce local opposition from trail users.

Your planned site may fall at least partially on Corps of Engineers operational facilities.

There is potential conflict with fishing access at the site.

During heavy rains debris is launched toward Morgantown from sites as much as 60 miles away. Sites include industrial, commercial, residential, forest, and agricultural activities. Some of these still use illegal open dumps. Others are operated with minimal concern for environmental issues.

River Flow Issues

The purposes of the dam are to (1) establish a constant pool level above the dam for barge navigation and (2) to control flow of the water supply to downstream navigation dams reaching down into the Ohio River below Pittsburgh. This is a regional operation, not a local one. The Corps changes gate openings remotely with changing water flow requirements. The dam does not control flooding, but receives flow from large upstream flood control reservoirs. During the summer there may be virtually no river current while during flood runoff the river current may exceed 5 mph.

During the planning for the Rye plant massive amounts of flow information were gathered, and may be available to you from either Rye or the Pittsburgh District Corps office.

Operational Issues

River Flow

As I see it, your wheel must handle all trash which is intercepted by the boom. Much of this is an easy matter, but there are also many items which pose potential difficulties.

If construction of the Rye power-plant does proceed, it is likely that all flow through Gate 6 may be shut off for periods of weeks at a time. There also may be shutoffs for maintenance if the plant is built. During flood flows very high currents must be expected. Rye will, of course, urge the Corps to maintain high flows to maximize power generation.

Natural Debris in the River

Much of what is visible on the river is not trash, but part of the natural aquatic environment. These items should, or perhaps must, be returned to the river downstream of the dam according to WV DNR policy. Specifically the facility must be prepared to handle and transfer:

- Brush of all sorts eroded from the bank as well as whole trees which have fallen from the riverbank, some of which may have trunks exceed 12 inches in diameter and lengths of 50 feet.
- Animal remains which will occasional include deer carcasses and fish up to 25 pounds in weight.


Trash Removal

Much of the trash is light debris like water bottles and food containers which your wheel can easily handle. On the other hand, significant amounts are materials which pose operational challenges of various sorts. Specifically, based on personal observations, the facility must be prepared to handle and remove:

- Dead domestic animals
- Landscaping debris
- Christmas trees and pumpkins
- Car and truck tires, both loose and on steel rims
- Propane cylinders, in both 1 and 19 pound sizes
- Old boats, boat docks and remains including metal and plastic barrels and Styrofoam billets
- Half filled barrels containing potentially hazardous wastes
- Paint, roofing, and solvent containers containing residues
- Waterlogged mattress and bedding
- Old portable fuel containers of all sizes
- Old life jackets
- Old sheds and debris from damaged buildings

Your machine is an excellent solution to the Jones Falls River trash problems. To adapt it to the Monongahela River is definitely a challenge.

Sincerely,



Wallace Venable