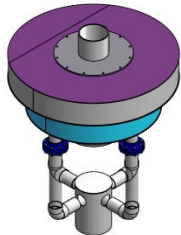


Heartland's Enhanced Pond Management System

Heartland Technology Partners' innovative Enhanced Pond Management System¹ (EPMSTM)² has been developed to deliver outstanding performance encompassing three specific unit operations: evaporation, aeration and mixing from top to bottom. All three are managed within simple, reliable and unobtrusive process systems that operate continuously with minimal maintenance and operator attention. The strength of the EPMS is Heartland's proprietary technology that continuously brings water from containment ponds or vessels and ambient air into intimate contact. This process takes place within a unique floating module that has no moving parts. The enclosed module as shown at left includes materials of construction and self-cleaning action that ward off detrimental effects of scaling and corrosion.



EPMS' ARE OFFERED FOR USES AND MARKETS THAT INCLUDE:

- Enhanced evaporation rates for ponds or vessels in E&P, landfill, utility, mining and other industrial operations
- Increasing dissolved oxygen levels to prevent septic conditions within stagnant water containment systems
- Mixing functional additives including oxygen and treatment chemicals from top to bottom
- Eliminating multi-media pollution associated with dispersion of mists and aerosols into the atmosphere
- Enhanced evaporation from waste heat and other sources of thermal energy
- Minimize effects of frozen pond surfaces on evaporations rates
- Management of recreational ponds
- Providing oxygen and dispersion of nutrients for aquaculture including fish and shellfish farming

ATTRIBUTES TO CONSIDER FOR POND OR VESSEL WATER CONTAINMENT MANAGEMENT SOLUTIONS:

- Environmentally sound principles:
 - ◊ Water & non-volatile components are returned to containment pond or vessel
 - ◊ Water vapor is transferred to ambient air
- Intake water from surface of pond or vessel is discharged to the bottom when desired
 - ◊ Outstanding turnover of containment ponds and vessels
 - ◊ Carries and mixes water treatment additives from bottom to top of ponds and containment vessels
- Thermal energy sources such as waste heat from engines, turbines or flare gas will enhance evaporation rates
- Tremendous increase in surface area of water exposed to air compared to pond or vessel surface area
- No troublesome small openings such as nozzles or high pressure required to contact gas and water
- Corrosion resistance construction throughout and only one moving part - a fan which is installed on land
- Modules are readily converted to work in any or all of evaporation, aeration and mixing service
- Modules may be operated in series, parallel or as multiple stand-alone units

¹ Enhanced Pond Management Systems are manufactured under one or more pending US and foreign patents that are owned by Heartland Technology Partners, LLC

² EPMS is a trademark and service mark for devices and services for managing water within containment ponds and vessels that are manufactured and offered by Heartland Technology Partners, LLC