

INFORMATION SHEET

ORDER NO. R5-2008-_____
WADHAM ENERGY LIMITED PARTNERSHIP AND
ENPOWER MANAGEMENT CORP.
BIOMASS-FIRED COGENERATION FACILITY
CLASS II SURFACE IMPOUNDMENTS
COLUSA COUNTY

Wadham Energy Limited Partnership owns and Enpower Management Corp. operates a biomass-fired electrical power plant. The plant is fueled by rice hulls, rice straw, and other agricultural biomass and produces approximately 28 megawatts of electricity. The facility is in Colusa County, approximately five miles southwest of Williams. The land on which the facility is located is owned by Wadham Energy Limited Partnership, a California limited partnership.

Concentrated cooling water from the power plant is produced at a maximum rate of 1.8 gpm and discharged to two, one-half acre, double-lined Class II surface impoundments. The wastewater is very high in salinity, especially after evapoconcentrating in the surface impoundments, and is a designated waste as defined in the California Water Code. Wastewater treatment residue from the concentrator also exceeds designated level guidelines for trace metals and total dissolved solids. The residue is disposed in an appropriate class landfill. Sanitary wastewater is disposed at an on-site septic system approved by Colusa County.

The disposal ponds are designed and constructed to Class II surface impoundment standards, and operated, maintained, and monitored in accordance with the requirements of Title 27, Division 2, Subdivision 1, California Code of Regulations. Requirements include a double-liner system, a blanket type leachate collection and removal system (LCRS), an underdrain system, groundwater monitoring, and monitoring of discharges and contents of the pond. The liner system consists of a 45-mil synthetic primary liner, a one-foot thick granular LCRS, a two-foot thick clay liner, and an underdrain system to ensure a minimum five foot separation between wastewater and the shallow groundwater. The underdrain system is also used for unsaturated zone monitoring. Two additional ponds are located adjacent to the surface impoundments. One pond contains well water which would be used in case of fire, and is lined to prevent loss of the water to the subsurface. The second pond is also lined and used for temporary storage of boiler blow-down water in case of plant shutdown. Neither of these two ponds are regulated under Title 27 or these waste discharge requirements.

Land surrounding the facility is primarily agricultural. Groundwater has been encountered on-site from three to seven feet below ground surface. Surface drainage from the facility is to an unnamed agricultural drain which flows to Cortina Creek, which is tributary to the Colusa Trough and the Sacramento River. Average rainfall is estimated at 15 inches per year, evaporation is estimated at 61 inches per year, and the 1,000-year, 24-hour storm event is estimated at 4.95 inches.

WLB: 12/5/2007