

INFORMATION SHEET

ORDER NO. _____
LITTLE NORWAY PARTNERS LP
WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL FACILITY
PLUMAS COUNTY

Little Norway Partners LP submitted a Report of Waste Discharge dated 17 July 2007 for a discharge of up to 11,200 gallons per day (gpd) of domestic wastewater from a new development in Plumas County consisting of 28 condominium units and a clubhouse on three existing parcels. The parcels (Assessor's Parcel Nos. 104-061-012, 104-061-013 and 104-062-003) are situated on either side of Peninsula Drive, Lake Almanor. The Report of Waste Discharge was deemed complete on 29 August 2007

Domestic wastewater from the condominiums and clubhouse will be discharged to ten individual 1,000-3,000 gallon concrete or fiberglass septic tanks. Average wastewater flow from the development has been estimated to be 5,600 gpd and maximum flow 11,200 gpd. Septic tank effluent flows by gravity flow or is pumped to two lift stations operated in series. The upper lift station, contained within a 60 inch diameter well, transfers collected effluent to the treatment plant via a 4 inch diameter pressure line which passes under Peninsula Drive.

The treatment system consists of a 3,000 gallon concrete tank which receives effluent from the upper lift station, a 12,000 gallon fiberglass recirculation tank, a 10,000 gallon fiberglass dosing tank and three synthetic media filters used for BOD, TSS and nitrogen reduction. The filters employ a highly absorptive inert non-woven textile material which functions similar to natural fine gravel media. Provision has been made for an additional filter unit if additional treatment is required to meet the effluent limitation for nitrogen. Disinfection of treated effluent is not presently included in the design, however the Discharger has been required to submit a design report that makes provision for its inclusion if shallow groundwater contamination is threatened.

Effluent from the treatment plant will be directly discharged to a subsurface disposal field employing gravelless chambers. The chambers are installed 18 to 24 inches below ground surface. Trench lines follow the slope contours and are divided into north and south fields. Six separate distribution boxes are fed by an automatic distributing valve assembly. Slopes in the disposal area vary from 18% to 28%. The total trench length is 2,600 ft and the total area taken up by the trenches is 0.42 acres. The replacement area, 0.5 acres, is to the east of the present disposal field and to the west of the treatment system.

The uppermost unit of the soil profile in the area of the proposed disposal field generally consists of clayey silt with fine to coarse sands which grade into dry silty sands. Underlying the silty sand unit is a stiff clayey silt with slight to moderate plasticity grading into a soft silty clay. A consolidated one to two foot thick ash flow (ash/tuff layer) was encountered in some of the piezometer borings and test pits at

depths ranging from three to ten feet below ground surface. The ash/tuff layer was not encountered in the southwestern portion of the disposal field area and the central portion of the replacement area. Bedrock was not encountered up to a depth of 60 feet below ground surface. Percolation from four test pits in the area ranged from 15.6 to 27.8 minutes per inch and averaged 19.7 minutes per inch. A value of 20 minutes per inch was used for calculation of the required disposal field area. In the opinion of staff the ash/tuff layer referenced above could cause perching of groundwater that would interfere with operation of the disposal field. The Discharger's consultant stated that if this were to occur, the ash tuff layer could be excavated and reformed to eliminate the perching condition. This Order requires the Discharger to submit a report including cost estimate for the excavation and reforming operation, and to provide financial assurance for implementation.

Domestic water for the subdivision will be supplied by the Lake Almanor Country Club Mutual Water District. Surrounding land uses are rural residential, recreational residential and open space.

The Discharger is required to install a minimum of three groundwater monitoring wells around the perimeter of the disposal area to determine direction of groundwater flow, and the quality of groundwater directly beneath the site. Quarterly monitoring is required for groundwater elevation, direction of groundwater flow, total and fecal coliform, chlorides, total dissolved solids, and nitrate. Annual groundwater monitoring is required for manganese and iron. There are no domestic wells in the vicinity of the disposal field, however, the Discharger has been required to institute some effluent nitrogen removal to lessen the threat of groundwater nitrate contamination.

When sufficient data have been collected, a determination will be made as to the extent, if any, of groundwater quality degradation due to discharge from the facility. After this determination has been made, a salt minimization program and further effluent nitrogen removal may be required.

The Board has considered anti-degradation pursuant to Resolution No. 68-16 and finds that not enough data exists to determine if this discharge is consistent with those provisions. Specifically, monitoring wells have not yet been installed adjacent to the groundwater disposal area. Therefore, the Monitoring and Reporting Program included within this Order incorporates the installation of monitoring wells to collect data for determining whether the discharge will cause unacceptable groundwater degradation