Jefferson County Schools Conifer High School

Approved BCWA Board September 10, 2014

Facility: Jefferson County Public Schools - Conifer High School	
TYPE OF PERMIT	Domestic-Minor Municipal, Mechanical Plant
Permit Number:	CO-047988
Permit Issue Date	4/28/2009
Permit Expire Date	5/31/2014
Facility Location:	in the N ½ of the SW ¼ of Section 14 and the N ½ of the SE ¼ of Section 15, T6S, R71W; at 10441 County Highway 73, Conifer, CO 80433 at 39º31'81" latitude north and 105º18'62" longitude West
SIC Code:	4190
Facility Classification:	Class B
Facility Hydraulic Capacity:	0.052 MGD (Peak Hourly .077 MGD)
Facility Organic Capacity:	220 lbs. /day
Treatment Works:	Raw sewage entering the treatment facility is first screen before entering a flow equalization/ anoxic basin. Variable speed, submersible pumps are used to transfer wastewater from the flow equalization /anoxic basin to the aeration basin at a constant flow rate. The anoxic basin is used for biological denitrification and the aeration basin provides nitrification and CBOD removal by the extended aeration activated sludge treatment process. A flocculating clarifier is provided to allow phosphorous removal by addition of alum. Additional treatment is provided denitrifying filter and a solids removal filter. Prior to discharge, disinfection by long duration contact with sodium hypochlorite is provided. Effluent wastewater flow is recorded and totalizer using a 90º V-notch weir.
Lift Stations:	WJE, WJM, Conifer WTP, 3 total
Service Areas:	Jefferson County Public Schools in the Conifer articulate area. 2 elementary schools, 1 Middle school, 1 High school. The facility also receives minor flows from both the west transportation facility and the District's water treatment plant. The District's wastewater collection system receives direct flows from Conifer High and West Jefferson Middle and Elementary school. Conifer High flows by gravity to the plant where West Jefferson Middle and Elementary flows are pumped through two lift stations and a force main. Sewage truck loads from Marshdale Elementary and west area transportation facility are discharged three times a week (i.e. Monday, Wednesday and Friday).
Compliance Schedules	Activities to meet Ammonia and TRC. Replace the chlorination/ dechlorination Disinfection system with Ultraviolet Light Disinfection.
Industrial Pretreatment Program	None

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2013 Service Area Population Estimate:	5 tabs at 2,400 EQR. 5 facilities, 2,100 students + staff (Primarily school sessions only)
2035 Service Area Population Estimate:	No expected increase in EQRs
2013 Average Daily Effluent Treated:	5,000 gpd
Plant Expansion:	None
Discharge Point:	Outfall 001A, following disinfection and prior to entering Lobo Creek, which is tributary to North Turkey Creek
Waterbody Identification:	Lobo Creek
Receiving Water Designation (Segment):	6b Mainstem of North Turkey Creek, from the source to the confluence with Turkey Creek.
Receiving Water Classification (Segment):	Aq Life Cold 1, Recreation E, Water Supply, Agriculture
Threatened and Endangered Species	None
Control Regulation #74	Because the discharge from this facility ultimately impacts Bear Creek Reservoir, it is subject to the Bear Creek Control Regulation, Regulation 74. This regulation imposes a total phosphorus concentration limitation of 1.0 mg/l on all dischargers in the watershed. In addition, the regulation specifies a mass limitation for dischargers of record.
Control Regulation #74 Wasteload Allocation	Cumulative annual limitation is 110 pounds of total phosphorus
Control Regulation #74 Total Phosphorus Limit	1.0 mg/l as monthly average
303(d) Listing Regulation #93	None
Temporary Modifications	None
Water Quality Pollutants of Concern	phosphorus, nitrogen, temperature, ammonia
BCWA Factsheets	BCWA Factsheet 26 BCW Demographics, BCWA Factsheet 41 Wastewater Demographics
Web Site	http://www.jeffcopublicschools.org/

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