

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0012

NPDES NO. CA 0004391

WASTE DISCHARGE REQUIREMENTS
FOR
COLLINS PINE COMPANY
CHESTER SAWMILL
PLUMAS COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

1. Collins Pine Company (hereafter Discharger) submitted a Report of Waste Discharge, dated 11 December 2001, and applied to renew their permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from their Chester sawmill and cogeneration power plant. The Discharger is currently regulated under Waste Discharge Requirements Order No. 97-117 (NPDES NO. CA0004391).
2. Collins Pine Company operates a sawmill and wood-burning cogeneration facility in Chester in Sections 6, 7 and 8, T28N, R7E, MDB&M and Section 12, T28N, R6E MDB&M as shown on Attachment A, which is incorporated herein and made part of this Order by reference. The sawmill produces approximately 120 million board feet of lumber per year. The cogeneration plant currently produces a gross 12-megawatts (MW) of electric power, and a net 6-MW, which are sold on the market.
3. The sawmill and power plant are shown on Attachment B, which is incorporated herein and made part of this Order by reference. They are bordered by the North Fork of the Feather River to the north, Highway 36 to the south, an open gravel area to the west, and an industrial area to the east. The Discharger owns three adjoining parcels of land totaling approximately 450 acres (APN's 100-230-016, 100-230-005, 001-130-077). The sawmill and power plant comprise approximately 100 acres. Approximately half of this portion of the facility is paved. Site grading and the storm drainage system direct sawmill and power plant storm water either to the eastern portion of the facility, where it percolates, to the southwestern portion of the facility where enters a drainage ditch, or to the southern portion of the facility where it exits the site via a drainage ditch that flows along the southern boundary eastward to a drainage swale.
4. The facility is in the Feather River Hydrologic Unit, Mount Harkness Hydrologic Subarea (No. 518.44), as depicted on interagency hydrologic maps prepared by the Department of Water Resources (DWR) in August 1986. The mean annual rainfall in the area is approximately 30 inches, and average evaporation is 40 inches.
5. Shallow groundwater is estimated to be approximately 10 feet below the ground surface (ft bgs) with shallower perched conditions during the spring snow melt. The

ground surface generally consists of large coarse gravels and cobbles. There are no groundwater monitoring or production wells located on-site. However, water level data from monitoring points that have since been abandoned suggest that groundwater flows southeasterly during the wet season, and southwesterly during the dry season.

6. There are three deep production wells in the Chester community operated by the Chester Public Utilities District. Static water level is approximately 27 ft bgs, and total depth ranges from 300 to 400 ft bgs. The closest production well is approximately half a mile southeast of the Collins Pine facility.
7. The Discharger operates a closed-looped recycle sprinkling system on a 55-acre log deck. No water from this recycle system is discharged off-site. The recycle system includes two log deck recycle ponds divided by gated culverts. Excess log deck runoff and storm water runoff is discharged to a gravel percolation/retention pond (gravel pit) west of the facility, as shown in Attachment C.
8. Annually, approximately 70 million board feet of logs are stacked on the log decks. During the dry summer months, the logs are sprinkled with water to prevent the development of blue stain and end checking. Excess log deck runoff drains to the two recycle ponds as shown on Attachment C, which is incorporated herein and made part of this Order by reference. Makeup water is provided by the freshwater storage pond during the summer months. Sprinkling is discontinued during the winter months. Log deck runoff contains bark, sawdust, tannins and lignins, dissolved organics, settleable, and suspended solids. Settled matter is rarely removed from the recycle pond bottoms. Instead it is generally flushed in the winter when excess storm water is discharged to the gravel percolation/retention pond (gravel pit) west of the sawmill.
9. In April 2000, Regional Board staff observed discharge of log deck recycle water from the log deck pond to a wetlands area tributary to Stover Ditch. This discharge was a violation of Waste Discharge Requirements and an Administrative Civil Liability was imposed. The Discharger agreed to pay a fine and provide restoration and improved habitat in the ditch between Stover Ditch and the fire pond. As a result of the dredging, rip-rap, and installation of small pools, fish are now observed this area of the ditch. The Discharger also installed conveyance to transfer storm water runoff from the recycle pond to the gravel percolation area west of the facility.
10. Wood waste from the sawmill is utilized for fuel in the cogeneration power plant. The Discharger diverts up to 3 million gallons per day (mgd) of water from the North Fork Feather River for use. The routing of water through the facility is summarized below and shown on Attachment D, which is incorporated herein and made part of this Order by reference:
 - At the firepond head gate, water is diverted between the fire pond (for use in the mill and plant) and Stover Ditch. Overflow from the fire pond, which is not used in the mill or plant, drains to the eastern drainage ditch which ultimately joins

with Stover Ditch. No pollutants from the mill or plant are discharged to the fire pond.

- Downstream in Stover Ditch, some water is diverted to the freshwater pond, at the freshwater pond head gate. This freshwater pond, which supplies makeup water to the log deck recycle pond during the summer, is a flow-through pond and drains back into Stover Ditch.
- Approximately 780,000 gallons per day (gpd) of water is pumped from the fire pond for use in the power plant and sawmill.

11. Water use through the plant and sawmill is summarized below and shown on Attachment E, which is incorporated herein and made part of this Order by reference:

- **Demineralizer.** Until August 2003, the demineralizer had been the primary process water treatment method. Approximately 40 gpm of treated water was polished with sand filtration followed by cation/anion exchange resins. Sand filter backwash was discharged to a sump, which drains into a settling pond. Regeneration of these resins was performed on-site approximately every three days. Approximately 5,000 gallons of spent reject water were produced during each regeneration, neutralized with acids or bases, and discharged to the settling pond.
- **Reverse osmosis system.** In August 2003, the Discharger installed a reverse osmosis system. At optimum operating conditions, it will treat approximately 70 gpm of water, generating 45 gpm of permeate (treated water) and 25 gpm of concentrate (brine). Since it currently generates only 35 gpm during cold weather conditions, the Discharger is considering installing a heat exchanger to improve operating conditions. The Discharger will abandon the demineralizer unit when the reverse osmosis system is fully operational, which is expected to be in Spring 2004.
- **Boiler.** Water that has been treated is stored in a storage tank and then metered into the de-aerator (DA) tank prior to use in the boiler. The boiler generates steam for the turbine generator. Steam from the turbine generator is subsequently used in the dry kilns and other parts of the sawmill and plant. Condensed steam is recycled back to the DA tank for reuse in the boiler. A low, continuous volume of boiler blowdown water is discharged to the settling pond. This wastewater is generally high in total dissolved solids and would also contain chemicals used to control scale and slime growth. The mud drum also discharges sludge-laden blowdown water to the settling pond.
- **Cooling Tower.** Approximately 290 gpm of water is used for cooling. Water is routed through the generator air cooler, the generator oil cooler, and finally the cooling tower. Some water is lost to evaporation and the remainder is discharged as blowdown water to the settling pond. Discharge from the cooling towers is

generally high in total dissolved solids, and would also contain chemicals used to control scale and slime growth.

- **Wet Electrostatic Precipitator.** Approximately 400 gpm of water is used in the wet electrostatic precipitator, clarifier, and pre-quench chamber. Settling of ash is aided with the addition of polymers. Wastewater from the electrostatic precipitator, which contains ash and polymers, is discharged to the settling pond.
- **General Plant Uses.** Approximately 50 gpm of water is used for general plant operations including: plant air compressors, front ash hopper seals, and plant floor cleaning. This discharge may contain ash, petroleum, and chemicals.

All water from these processes is discharged to the ash settling pond.

12. Overflow water from the fire pond and the ash settling pond commingles in the eastern drainage ditch prior to discharge to Stover Ditch at latitude 40° 18' 30" and longitude 121° 14' 30" as shown on Attachment C. Order No. 97-117 identified Discharge 001 to be in the eastern drainage ditch immediately downstream of the point where the ash settling pond drains into the eastern drainage ditch. However, overflow water from the fire pond is excess water diverted from the North Fork of the Feather River (and not process water) and fish have been observed in the eastern drainage ditch upstream of the ash settling pond discharge point. This Order revises Discharge 001 to be the location where discharge from the ash settling pond enters the eastern drainage ditch.
13. Between 150 to 225 cubic yards ash are generated each month, averaging 2,250 cubic yards per year. Ash is stored on-site temporarily in an unpaved area at the western portion of the site. It is removed regularly and used at Collins Pine timberlands as soil amendment. The following compounds were measured in ash sampled in July 2002: (using waste extraction tests with deionized water as the extractant):

<u>Compound</u>	<u>Concentration Range</u> <u>(ug/L)</u>	<u>Threshold Limits (Basis)</u> <u>(ug/L)</u>
Aluminum	5,700	1,000/200 (Primary/Secondary MCL)
Barium	1,600	1,000 (Primary MCL)
Hexavalent Chromium	22	0.2 (Public Health Goal)
Sodium	46,000	2,000 (Health Advisory or SNARL ¹)
pH	11.9	6.5 to 8.5 (Secondary MCL)

¹Health Advisory or SNARL: Drinking water health advisory or suggested no-adverse response level for toxicity other than cancer risk

14. A 23,000-gallon above ground diesel tank, 14,000-gallon aboveground diesel tank, 14,000-gallon above ground gasoline tank, and 200-gallon lubricating oil tanks are located at the tank farm area. Other fuels, oils, and chemicals are stored at various facility locations, including two 200-gallon diesel tanks near the fire pumps. All the tanks at the facility are protected by secondary containment. The Discharger has a Spill

- Prevention Control and Countermeasure Plan dated July 2001 stamped by a registered civil engineer. Material Safety Data Sheets are available for all chemicals stored at the facility.
15. Domestic wastes generated from the sawmill and powerhouse are discharged to a septic tank/leachfield systems at the facility. This system was installed in 2002. The Discharger plans to pump this system every 2 to 3 years. Domestic wastes generated from the main office are routed to the Chester wastewater treatment plant. This includes wastes from the bathrooms and break areas in the main office.
 16. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and describes an implementation program and policies to achieve water quality objectives for all waters of the Basin. This includes plans and policies adopted by the SWRCB and incorporated by reference, such as Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California (Resolution No. 68-16)." These requirements implement the Basin Plan.
 17. USEPA adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality criteria applicable to this discharge. The State Water Resources Control Board (SWRCB) adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy), which contains guidance on implementation of the NTR and the CTR.
 18. The Basin Plan at page II-2.00 states: "Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams." The Basin Plan does not identify beneficial uses specifically for the Stover Ditch, but the Basin Plan does identify present uses for Lake Almanor to which Stover Ditch is tributary.
 19. The Basin Plan identifies the following existing beneficial uses for Lake Almanor: hydropower generation (PWR); water contact recreation (REC-1); freshwater habitat (COLD and WARM); warm water spawning (SPWN); wildlife habitat (WILD); esthetic enjoyment; and preservation and enhancement of fish, wildlife, and other aquatic resources. In addition, State Board Resolution No 88-63 (Sources of Drinking Water Policy), incorporated into the Basin Plan pursuant to Regional Board Resolution 89-056, requires the Regional Board to assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in Table II-1.

The Basin Plan on page II-1.00 states: “Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning...” and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.”

Upon review of the flow conditions, habitat values, and beneficial uses of Lake Almanor, and the facts described above, the Regional Board finds that the beneficial uses identified in the Basin Plan for Lake Almanor are applicable to Stover Ditch as discussed below. The Basin Plan defines beneficial uses and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.”

- a. Municipal and Domestic Supply. The Regional Board is required to apply the beneficial uses of municipal and domestic supply to Stover Ditch based on State Board Resolution No. 88-63 which was incorporated in the Basin Plan pursuant to Regional Board Resolution 89-056. In addition, the State Water Resources Control Board (SWRCB) has issued water rights to existing water users downstream of the discharge for irrigation uses. In addition to the existing water uses, growth in the area, downstream of the discharge is expected to continue, which presents a potential for increased domestic and agricultural uses of the water in Lake Almanor.
- b. Water Contact and Noncontact Recreation and Esthetic Enjoyment. The Regional Board finds that the discharge flows through residential Chester areas, there is ready public access to Stover Ditch, exclusion of the public is unrealistic and contact recreational activities currently exist along Stover Ditch and downstream waters and these uses are likely to increase as the population in the area grows. Prior to flowing into Lake Almanor, Stover Ditch flows through areas of general public access, meadows, residential areas and parks. Lake Almanor also offers recreational opportunities.
- c. Freshwater Replenishment. There is hydraulic continuity between Stover Ditch and Lake Almanor. Stover Ditch adds to the water quantity and may impact the quality of water flowing down stream of Lake Almanor.

- e. Preservation and Enhancement of Fish, Wildlife and Other Aquatic Resources. Stover Ditch flows to Lake Almanor. The fish species present in Stover Ditch and downstream waters are consistent with warm and cold water fisheries. The Basin Plan (Table II-1) designates Lake Almanor as being warm and cold freshwater habitat. Therefore, pursuant to the Basin Plan (Table II-1, Footnote (2)), the warm and cold designation applies to Stover Ditch. The cold-water habitat designation necessitates that the in-stream dissolved oxygen concentration be maintained at, or above, 7.0 mg/l. This approach recognizes that, if the naturally occurring in-stream dissolved oxygen concentration is below 7.0 mg/l, the Discharger is not required to improve the naturally occurring level.
20. The beneficial uses of groundwater are municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).
21. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified this discharge as a major discharge. This classification was based on historically higher discharge flow rates and greater contaminant loading to the Feather River. This Discharger has since substantially improved their operations and effluent quality. For this reason, Regional Board staff is working with the Discharger and the USEPA to reclassify this discharge as a minor discharge. However, during the preparation of this permit reclassification was not complete.
22. Federal regulations contained in Title 40 Code of Federal Regulations (CFR) Part 122.4(d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard. USEPA adopted the National Toxics Rule (NTR) on 5 February 1993 and the California Toxics Rule (CTR) on 18 May 2000. The NTR and CTR contain water quality standards applicable to this discharge. The SIP contains guidance on implementation of the NTR and CTR. In addition, the Basin Plan contains narrative and numeric water quality standards consisting of water quality objectives and beneficial uses.

Based on current facility operations, information submitted as part of the application and as directed by monitoring and reporting programs, the Regional Board finds that the discharge does have a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective for suspended solids, settleable solids, specific conductance, and pH. Effluent limitations for these constituents are included in this Order.

23. On 28 February 2001, the Discharger was issued a letter under the authority of California Water Code Section 13267 requesting additional effluent and receiving water monitoring so that a reasonable potential analysis of priority pollutants could be performed. The Discharger had sampled the effluent and receiving water on 20 May 2001, 15 July 2002,

and 25 November 2002 to determine if priority pollutants established in the CTR and NTR were detected. Analytical results were submitted for volatile substances, semi-volatile substances, pesticides, metals, asbestos, and dioxin. At the request of Regional Board staff, the Discharger also performed three additional rounds of sampling for cyanide in 2003.

Except for cyanide, priority pollutant substances were not detected in the effluent and receiving water samples at concentrations that will cause or contribute to a violation of any applicable water quality objective contained in the Basin Plan. For several organic parameters, water quality criteria have been established at concentrations less than laboratory detection limits. Based on current operations, it is reasonable to assume that these remaining constituents will not cause or contribute to violations of water quality criteria either.

24. Low-level cyanide sampling was conducted four times. Cyanide was reported once above water quality criteria, both in the effluent and in the receiving water. Since submittal of these analyses the laboratory conducting the tests confirmed there were QA/QC problems with cyanide analyses. For that reason, the presence or absence of cyanide in the discharge and receiving water has not yet been confirmed. Since the intake water and receiving water share the same source (Feather River), receiving water quality has been considered representative of intake water quality. For these reasons, a water quality-based effluent limitation for cyanide was not included in this Order. Additional information is needed to confirm the presence or absence of cyanide in the effluent and receiving water. The Discharger is required to develop a monitoring study that provides for coordinated sampling and appropriate comparison between intake and effluent cyanide concentration. At the conclusion of the study, should it be confirmed that cyanide is present in the effluent and/or the intake water, this Order may be reopened and effluent limits and/or intake credits for cyanide may be included.
25. Federal Regulations for storm water discharges were promulgated by USEPA on 16 November 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities, which discharge storm water associated with industrial activity (storm water), to obtain NPDES permits and to implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate industrial storm water pollution.
26. The SWRCB adopted Order No. 97-03-DWQ (General Permit No. CAS000001), on 17 April 1997, specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, that requires submittal of a Notice of Intent, preparation of a Storm Water Pollution Prevention Plan, site map, and monitoring program by industries to be covered under the permit. The General Permit, Table D, requires sawmills and steam electric generating facilities to sample for additional constituents. These requirements relieve the Discharger of

- submitting a Notice of Intent for coverage under the General Industrial Storm Water Permit.
27. Resolution No. 68-16 requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the state unless it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., constituent concentrations that exceed water quality objectives). Resolution No. 68-16 applies to both surface water and storm water.
 28. The Regional Board has considered Resolution No. 68-16 and finds that the current discharge may be inconsistent with this policy, and could cause an increase in groundwater constituent concentrations above water quality objectives, specifically: pH, specific conductance, total dissolved solids, and inorganics (including metals). Additionally, it has not been demonstrated that degradation of groundwater by this discharge is consistent with maximum benefit to the people of the State. Therefore to assure that the discharge, as permitted herein, is consistent with Resolution No. 68-16, the Discharger is required to propose and fully implement Best Practicable Treatment or Control (BPTC) measures so that the discharge does not create a condition of pollution or nuisance and that the highest water quality will be maintained.
 29. Ash characterization performed by the Discharger in July 2002 shows that leachate from the unpaved ash storage area has a reasonable potential to impact the underlying groundwater. The unlined recycle ponds and unlined ash settling pond also have a reasonable potential to impact the underlying usable groundwater. The potential impacts on usable groundwater and the appropriate level of degradation that complies with Resolution No. 68-16 have not been fully evaluated. The Discharger's current effort does not constitute BPTC as intended in Resolution No. 68-16.
 30. The Discharger intends to pave the ash storage area, reduce the volume of ash stored on-site during the winter/rainy season, and cover the ash piles under tarps and/or within buildings. This Order also establishes a schedule of tasks to evaluate BPTCs for the storage and disposal components at the facility. Completion of these tasks, and implementation of the approved strategies will ensure that BPTC and the highest water quality consistent with maximum benefit to the people of the State will be achieved. Should full BPTC implementation not be performed, the Regional Board may reopen this Order to reconsider groundwater limitations, groundwater monitoring, and other requirements to comply with Resolution No. 68-16. Accordingly, the discharge is consistent with Resolution No. 68-16.
 31. The Basin Plan identifies numerical water quality objectives for waters designated as municipal supply. These are the maximum contaminant levels (MCLs) specified in the

following provisions of Title 22, California Code of Regulations: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) of Section 64449. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that the Regional Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses and do not contain waste constituents in concentrations statistically greater than background water quality.

32. The Basin Plan contains narrative water quality objectives for chemical constituents, taste and odor, and toxicity. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in plants or animals. The chemical constituent objective requires that groundwater shall not contain chemical constituents in concentrations that adversely affect beneficial uses.
33. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), in accordance with Section 13389 of the California Water Code.
34. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
35. Title 40 CFR Part 423 specifies effluent limitations for the Steam Electric Power Generating Point Source Category. Since fossil fuel is used secondarily, these limitations are not applicable to the discharge. However, since the Discharger does spray water on their logs, effluent limitations established in Timber Products Processing Point Source Category, Wet Storage Subcategory (40 CFR Part 429, Subpart I) are applicable to the discharge.
36. The Regional Board has considered the information in the attached Information Sheet in developing the findings in this Order. The attached Information Sheet is part of this Order.
37. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

38. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
39. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect 10 days from the date of hearing, provided USEPA has no objections.

IT IS HEREBY ORDERED that Order No. 97-117 is rescinded and Collins Pine Company, Chester Sawmill, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastewater, including storm water, at locations or in a manner different from that described in Finding Nos. 3, 7, 8, 11, and 12 is prohibited.
2. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Standard Provision A.13 (see attached “Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES), March 1991”).
3. The discharge of leachate from wood fuel stockpiles or ash stockpiles to surface waters, surface water drainage courses, or groundwater is prohibited.
4. The discharge of ash, bark, sawdust, wood, debris, or any other wastes recognized as originating from the facility to surface waters or surface water drainage courses is prohibited.
5. The discharge of hazardous or toxic substances, including water treatment chemicals, solvents, or petroleum products (including oil, grease, gasoline and diesel) to surface waters or groundwater is prohibited.
6. Discharge of waste classified as “hazardous” as defined in Section 2521(a) of Title 23, California Code of Regulations (CCR), Section 2510, et seq., (hereafter Chapter 15), or “designated,” as defined in Section 13173 of the California Water Code, is prohibited.

B. Effluent Limitations (Discharge 001)

1. Discharge 001, from the ash settling pond, in excess of the following is prohibited:

<u>Parameter</u>	<u>Unit</u>	<u>30-DayAverage</u>	<u>Daily Maximum</u>
Suspended Solids	mg/L	--	40

Settleable Solids	mL/L	0.1	0.2
Specific Conductance	µmhos/cm	--	900
Chemical Oxygen Demand	mg/L	--	40

2. Discharge 001 shall not have a pH less than 6.0 or greater than 9.0.
3. Survival of aquatic organisms in 96-hour acute bioassays of undiluted waste from Discharge 001 shall be no less than:

Minimum for any one bioassay-----70%
Median for any three or more consecutive bioassays---90%

C. Discharge Specifications

1. Neither the treatment nor the discharge shall cause a pollution or nuisance as defined by the California Water Code, Section 13050.
2. The discharge shall not cause degradation of any water supply.
3. Freeboard limitations for the log deck recycle ponds shall be in effect in the following manner:
 - a. Between 1 October and 1 April, the Discharger shall maintain a minimum of two feet of freeboard in each pond (measured vertically to the lowest point of overflow).
 - b. During the remainder of the year, the Discharger shall maintain a minimum of 1 foot of freeboard in each pond.
4. The Discharger shall maintain a minimum of 1 foot of freeboard in the recycle pond (measured vertically to the lowest point of overflow).
5. Discharge to septic tank leachfield systems shall remain underground at all times.

D. Sludge, Wood Waste, and/or Ash Management

1. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, California Code of Regulations (CCR), Division 2, Subdivision 1, Section 20005, et seq.

2. Any proposed change in sludge or ash use or disposal practice shall be reported to the Executive Officer at least **30 days** in advance of the change.
3. Fly ash removed from the facility shall be:
 - a. Tilled into agricultural fields for soil amendment; or
 - b. Disposed in a dedicated unit consistent with Title 27, Section 20200(b); or
 - c. Disposed in a Class III landfill consistent with Title 27, Section 20220(d).

Any other use shall constitute disposal and shall be subject to Title 27, CCR requirements.

E. Receiving Water Limitations

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in Stover Ditch:

1. Concentrations of dissolved oxygen to fall below 7.0 mg/L.
2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
3. Oils, greases, waxes, floating material (liquids, solids, foams, and scum), or suspended material to create a nuisance or adversely affect beneficial uses.
4. Aesthetically undesirable discoloration.
5. Fungi, slimes, or other objectionable growths.
6. The turbidity of receiving waters to increase over background levels by more than:
 - a. 1 NTU when background turbidity is between 0 and 5 NTUs;
 - b. 20 percent when background turbidity is between 5 and 50 NTUs;
 - c. 10 NTUs when background turbidity is between 50 and 100 NTUs; and
 - d. 10 percent when background turbidity is greater than 100 NTUs.

In determining compliance with the above limits, appropriate averaging periods may be applied upon approval by the Executive Officer.

7. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. In determining compliance with these limits, appropriate averaging periods may be applied upon approval by the Executive Officer.
8. Deposition of material that causes nuisance or adversely affects beneficial uses.
9. Increase the normal ambient temperature of waters by more than 5°F (3°C). In determining compliance with these limits, appropriate averaging periods may be applied upon approval by the Executive Officer.
10. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
11. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or to cause nuisance or adversely affect beneficial uses.
12. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
13. Violations of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB pursuant to the CWA and regulations adopted thereunder.

F. Groundwater Limitation

1. Discharges from the facility shall not cause underlying groundwater or groundwater downgradient of the facility to:
 - a. Contain waste constituents in concentrations statistically greater than background water quality;
 - b. Exhibit a pH of less than 6.5 or greater than 8.5 pH units;
 - c. Impart taste, odor, toxicity, or color that creates nuisance or impairs any beneficial use.

G. Provisions

1. The Discharger shall comply with all the items of the “Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES),” dated

1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)."

2. The Discharger shall comply with the attached Monitoring and Reporting Program No. R5-2004-0012, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.
3. Should any of the analyses required in the Monitoring and Reporting Program No. R5-2004-0012 be performed by the Discharger or at a non-certified laboratory, the Discharger shall comply with all applicable parts of the Standard Provisions, Section C., Provisions for Monitoring including implementation of a Quality Assurance-Quality Control (QA-QC) Program and preparation of a QA-QC Plan. The QA-QC Program must conform to US EPA guidelines or to procedures approved by the Executive Officer. The QA-QC Plan must be prepared at least **one month** prior to on-site analysis, and reviewed and updated, if necessary, at a frequency not less than every 3 years.
4. The Discharger shall conduct monitoring as specified in Monitoring and Reporting Program No. R5-2004-0012, to determine if the discharge from Discharge 001 contains priority pollutants identified in the California Toxics Rule and National Toxics Rule as shown in Attachment F. Sampling for priority pollutants shall be performed twice, once by August 2004 and once prior to permit renewal. If after a review of monitoring results it is determined that the discharge causes, has the reasonable potential to cause, or contribute to an in-stream excursion above water quality objectives, this Order will be reopened and a limitation based on that objective included.
5. The Discharger shall conduct chronic toxicity testing **annually** as specified in Monitoring and Reporting Program No. R5-2004-0012. If initial and confirmation testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a work plan to conduct a toxicity reduction evaluation (TRE), and upon approval conduct the TRE. This Order will be reopened to include a chronic toxicity limitation and/or a limitation for the specific toxicant identified in the TRE. Additionally, if a chronic toxicity water quality objective is adopted by the SWRCB, this Order may be reopened to include a limitation based on that objective.
6. The Discharger shall complete facility improvements designed to protect water quality, perform water quality studies, and implement an enhanced monitoring program according to the following schedule as described below. The following reports required in Provisions G.7, G.8, G.9, G.16, and G.17 shall be submitted

pursuant to Section 13267 of the California Water Code, and shall be prepared by a third-party California Registered Professional Engineer, Geologist, or Engineering Geologist. Any surveying shall be performed by a California Registered Land Surveyor or Engineer qualified to perform surveying.

7. To confirm if cyanide is present or absent in the discharge and receiving water the Discharger is required to perform the following:
 - Within **3 months** of adoption of this Order, the Discharger shall submit a *Cyanide Sampling and Analysis Plan* to determine the presence or absence of cyanide in the effluent and intake water. This sampling and analysis plan shall include sampling locations, sample techniques, sample timing and frequency, analytical methods, method detection/reporting limits, bottle sizes, holding times, contract laboratory information, and necessary quality-control/quality assurance requirements. The Discharger shall consider the retention time through the facility when preparing this sampling and analysis plan. The work plan is subject to Regional Board review prior to implementation.
 - Within **2 weeks** of Regional Board review and acceptance, the Discharger shall implement all activities described in the *Cyanide Sampling and Analysis Plan*.
 - The Discharger shall perform concurrent monitoring of intake, effluent, and upstream and downstream receiving water in accordance with the Monitoring and Reporting Program No. R5-2004-0012.
 - Within **24 months** of adoption of this Order, the Discharger shall submit *Cyanide Sampling Summary Report* summarizing activities performed, cyanide data collected, and conclusions. The report shall attempt to determine whether cyanide is present or absent in the effluent and the intake water. Should cyanide be present in either, this Order may be reopened and effluent limits and/or intake credits for cyanide may be included.
8. Within **12 months** of Order adoption, the Discharger shall submit an *Ash Management and Storage Workplan*. The report shall identify BPTCs to prevent the infiltration of ash leachate to groundwater and the pollution of storm water runoff from ash or ash by-products. BPTCs shall include, but not be limited to: paving the ash storage area, reduction of on-site storage of ash, covering ash storage area (with tarps and/or within buildings). The evaluation shall include an assessment of the implementability, effectiveness, and cost of each BPTC. Effectiveness shall be measured by reduction of impacts to groundwater and/or surface water including estimated concentration or mass loading reductions for each BPTC measure. Recommended BPTCs based on the BPTC evaluation, as well as an implementation schedule shall be proposed. Full implementation shall be performed within **3 years** of adoption of this Order. The component evaluation,

recommended improvements, and implementation schedule are subject to the Executive Officer's approval.

9. Within **24 months** of Order adoption, the Discharger shall submit a *BPTC Evaluation Report and Implementation Workplan* for the remainder of the facility. The report shall identify portions of the facility requiring additional BPTCs and include a comprehensive evaluation of potential BPTCs for each such portion of the facility. The evaluation shall include an assessment of the implementability, effectiveness, and cost of each BPTC. Effectiveness shall be measured by reduction of impacts to groundwater and/or surface water including estimated concentration or mass loading reductions for each BPTC measure. Recommended BPTCs based on the BPTC evaluation, as well as an implementation schedule shall be proposed. The schedule for full implementation shall be as short as practicable, and in no case shall it exceed **3 years** of adoption of this Order unless approved by the Executive Officer. The component evaluation, recommended improvements, and implementation schedule are subject to the Executive Officer's approval.
10. Should full implementation of BPTCs not be implemented, this Order may be reopened to incorporate groundwater numerical limits, groundwater monitoring requirements, and/or additional requirements in accordance with Resolution No. 68-16.
11. This Order establishes concentration-based effluent limits. Mass-based effluent limits are also required to be established, however it is not possible to establish the mass-based effluent limits at this time due to lack of intake and effluent flow information. This Order requires the Discharger to construct, maintain, and operate such facilities as are necessary to accurately measure the flow of the intake stream, effluent discharge, and the receiving water upstream from the discharge. Upon review of sufficient flow information, the Regional Board may reopen this Order and establish mass-based effluent limits and an effluent flow limit.
12. If after a review of any monitoring results, it is determined that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above water quality objectives for any pollutant, this Order may be reopened and limitations based on those objectives included. The Discharger may also conduct studies pertaining to Facility operations, the effluent discharge, and the receiving water. For example, such studies may include a site-specific metals translator study, or a mixing zone and dilution study. If requested, the Regional Board will review such studies and if warranted, will reopen this permit to make appropriate changes. This permit may also be reopened specifically to include mass-based effluent limitations, flow limitations, or effluent limitations and/or intake water credits for cyanide.

13. If pollutants are detected in discharges from the Discharger's facility, but insufficient information exists to establish an effluent limit or determine if an effluent limit is necessary, then additional monitoring will be required to provide sufficient information.
14. Septic tanks shall be inspected and pumped a minimum of **every three years**. A pumping report, which shall include volume of materials pumped and condition of septic tanks, shall be submitted within **30 days** of pumping. Any septic tank or leachfield failure shall be reported immediately to the Regional Board.
15. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
16. By **15 August 2004** the Discharger shall submit a current Storm Water Pollution Prevention Plan (SWPPP) containing best management practices to reduce pollutants in storm water discharges. The SWPPP shall include recent facility upgrades and contain current and accurate information regarding storm water movement through the facility, storm water discharge locations, and storm water controls. The Discharger shall amend the SWPPP whenever there is a change in construction, site operation, or maintenance that may affect the discharge of significant quantities of pollutants to surface water or groundwater. The SWPPP must also be amended if there are storm water-related violations of this permit, or the Discharger has not achieved the general objectives of controlling pollutants in the storm water discharges.
17. The Discharger shall comply with the standards contained in the Health and Safety Code, Chapter 6.67, Aboveground Storage of Petroleum, including submitting a current and accurate Spill Prevention, Countermeasure and Control Plan by 15 May 2004.
18. The Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge or water treatment chemicals used. Notification on water treatment chemical changes shall include information from the manufacturer on toxicity and hazardous classifications.
19. The Discharger shall use the best practicable cost-effective control techniques(s) currently available to comply with discharge limits specified in this Order.

20. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
21. This Order expires on **1 January 2009** and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than **180 days** in advance of such date an application for renewal of waste discharge requirements if it wishes to continue the discharge.
22. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of Incorporation if a corporation, the name, address, and the telephone number of the persons responsible for contact with the Regional Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 30 January 2004.

THOMAS R. PINKOS, Executive Officer

MEW:

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

NPDES NO. CA0004391

MONITORING AND REPORTING PROGRAM NO. R5-2004-0012
FOR
COLLINS PINE COMPANY
CHESTER SAWMILL
PLUMAS COUNTY

The monitoring and reporting program incorporates requirements for monitoring the following: precipitation, intake water, ash settling pond effluent (Discharge 001), chronic toxicity, receiving water, ash, industrial storm water, recycle and ash settling ponds, and aboveground petroleum storage. This monitoring and reporting program shall not be changed unless a revised monitoring and reporting program is issued by the Executive Officer.

All cyanide results shall be reported with a reporting limit less than or equal to 5 ug/L unless not technically achievable. All reporting limits greater than 5 ug/L must be accompanied by a letter of explanation prior to Executive Officer acceptance.

PRECIPITATION MONITORING

Precipitation information shall be submitted monthly:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Precipitation	Inches	Gauge	Daily

INTAKE WATER SAMPLING

Sampling of the intake water for cyanide shall be performed at the Fire Pond Head Gate.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Cyanide	ug/L	Grab	Monthly ¹
Priority Pollutants ²	ug/L	Grab	Twice ³

¹ Monthly until completion of the *Cyanide Sampling Summary Report*, at which time frequency will be reduced to quarterly. Sampling shall coincide with cyanide sampling of Discharge 001.

² See Attachment F for Priority Pollutants.

³ First sampling event performed by 31 August 2004 and reported by 15 November 2004. The second sampling event shall be conducted such that results are submitted with the permit renewal application required in Provision G.21. Sampling shall be performed in coordination with Priority Pollutant sampling of effluent.

ASH SETTLING POND EFFLUENT MONITORING (DISCHARGE 001)

Effluent samples shall be collected at the point of discharge from the ash settling pond (Discharge 001) to the eastern drainage ditch. The results shall be submitted with the monthly monitoring report and include the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u> ¹
Estimated Discharge Flow	cfs	Continuous	Daily
pH	Units	Grab	Daily
Settleable Solids	mL/L	Grab	Daily
Specific Conductance	umhos/cm	Grab	Daily
Turbidity	NTU	Grab	Weekly
Total Suspended Solids	mg/L	Grab	Weekly
Chemical Oxygen Demand	mg/L	Grab	Monthly
Chlorine Residual	mg/L	Grab	Monthly
Tannins and Lignins	mg/L	Grab	Monthly
Acute Toxicity ²	percent survival	Grab	Twice per year
Cyanide	ug/L	Grab	Monthly ³
Oil and Grease	mg/L	Grab	Twice per year
General Minerals ⁴	ug/L	Grab	Annually
Priority Pollutant Inorganics ⁵	ug/L	Grab	Annually
Priority Pollutant Organics ⁶	ug/L	Grab	Twice ⁷

¹ Samples shall be collected during continuous discharge. If the discharge is intermittent rather than continuous, then the first day of each intermittent discharge shall be monitored, but at a frequency of no more than twice the frequency noted.

² 96-hour bioassay using rainbow trout as the test species.

³ Monthly for a minimum of one year and until completion of the *Cyanide Sampling Summary Report*, at which time frequency may be reduced with the approval of the Executive Officer. Sampling shall coincide with cyanide sampling of intake water.

⁴ Includes bicarbonate, carbonate, calcium, chloride, magnesium, nitrate, potassium, silica, sodium, and sulfate.

⁵ See Attachment F for Priority Pollutant Inorganics. Results must include pH and hardness.

⁶ See Attachment F for Priority Pollutant Organics.

⁷ First sampling event performed by 31 August 2004 and reported by 15 November 2004. The second sampling event shall be conducted such that results are submitted with the permit renewal application required in Provision G.17. Sampling shall be performed in coordination with receiving water sampling, Priority Pollutant Inorganics sampling of the effluent, and Priority Pollutant intake water sampling.

THREE SPECIES CHRONIC TOXICITY

Chronic toxicity monitoring of discharge from the ash settling pond (Discharge 001) shall be conducted **annually** to determine whether the effluent is contributing toxicity to the eastern drainage ditch and/or Stover Ditch. The eastern drainage ditch is of concern since fish have been observed in this ditch. The sample shall be representative of typical operations (i.e. not immediately after pond cleaning). The testing shall be conducted as specified in EPA 600/4-91-002, or latest edition. If undiluted effluent exhibits toxicity, the Discharger shall sample during the next available discharge event and conduct the test using the dilution series specified below. Chronic toxicity samples shall be collected at the ash settling pond discharge prior to its entering the eastern drainage ditch. Twenty-four hour composite or individual grab samples shall be representative of the volume and quality of the discharge. Date and time of sample collection shall be recorded. The results shall be submitted with the monitoring report and include the following:

- Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum
- Frequency: Annually. If no toxicity is exhibited during two continuous years of testing the frequency may be reduced upon written approval by the Executive Officer.

	Dilutions (%)					Controls	
	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>	<u>12.5</u>	<u>Receiving Water</u>	<u>Lab Water</u>
% Discharge 001 Effluent	100	75	50	25	12.5	0	0
% Dilution Water ¹	0	25	50	75	87.5	100	0
% Lab Water	0	0	0	0	0	0	100

¹ Dilution water shall be receiving water from the eastern drainage ditch upstream from Discharge 001 or Stover Ditch upstream from where the eastern drainage ditch discharges to Stover Ditch. If the receiving water exhibits toxicity, or if no receiving water is available, the Discharge may be required to use lab water as dilution water. The dilution series may be modified after the initial test upon approval of the Executive Officer.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Receiving water samples shall be taken from the following:

<u>Station</u>	<u>Description</u>
R-1	Stover Ditch, 50 feet upstream from where the eastern drainage ditch discharges to Stover Ditch
R-2	Stover Ditch, 50 feet downstream from where the eastern drainage ditch discharges to Stover Ditch
R-3	Discharge of Fresh Water Pond

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions in Stover Ditch bounded by Stations R-1 and R-2. Attention shall be given to the presence of or absence of:

- | | |
|---------------------------------|----------------------------------|
| a. Bark or sawdust | e. Scum or foam |
| b. Floating or suspended matter | f. Bottom deposits |
| c. Oil sheen or slick | g. Aquatic life |
| d. Discoloration | h. Upstream flow in Stover Ditch |

Notes on receiving water conditions shall be summarized in the monthly monitoring report.

Grab samples shall be collected at approximately the same time as the discharge samples. The results shall be submitted with the monthly monitoring report and include the following:

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
Maximum Temperature	°C	R-1, R-2 and R-3	Daily/Weekly ¹
pH	Units	R-1 and R-2	Weekly
Specific Conductance	umhos/cm	R-1 and R-2	Weekly
Dissolved Oxygen	mg/L	R-1 and R-2	Weekly
Turbidity	NTU	R-1 and R-2	Weekly ²

¹ Daily from 1 June to 1 November of each year; weekly remainder of the year.

² Turbidity shall be determined by (1) individual samples or (2) by samples taken over an appropriate averaging period.

(1) Individual sampling – daily

(2) Averaging Periods – a minimum of four samples per day from each upstream and each downstream station for a period of up to 4 days during discharge. Samples collected for averaging must be spaced at least 3 hours apart.

ASH MONITORING

The Discharger shall record in tabular format the following information **monthly**:

- Volume of fly ash and bottom ash generated (recorded individually)
- Volume of material stored at facility
- Volume of material removed from facility
- Disposal location or soil amendment application area

Should ash be used as a soil amendment, for each application area the following shall be recorded in tabular format **monthly**:

- Area of land where ash is applied (acres)
- Volume of ash applied (cubic yards)

A representative composite sample of the fly ash shall be tested **annually** for total and dissolved constituents. Dissolved constituents shall be obtained using the Waste Extraction Test (WET) described in the CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24(a)(2) with deionized water for the extraction solvent. The deionized water extract shall be analyzed for the following. The analytical results and the above itemized information shall be summarized and submitted in an annual report to be submitted by 1 February of each year.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Moisture Content	% moisture	Composite	Annually
pH	Units	Composite	
General Minerals ¹	mg/kg; mg/L	Composite	
Priority Pollutant Metals ²	mg/kg; ug/L	Composite	
Aluminum	mg/kg; ug/L	Composite	
Barium	mg/kg; ug/L	Composite	
Boron	mg/kg; ug/L	Composite	
Cobalt	mg/kg; ug/L	Composite	
Iron	mg/kg; ug/L	Composite	
Manganese	mg/kg; ug/L	Composite	
Molybdenum	mg/kg; ug/L	Composite	
Vanadium	mg/kg; ug/L	Composite	
2,3,7,8-TCDD and congeners	pg/g; pg/L	Composite	

¹ Includes bicarbonate, carbonate, calcium, chloride, magnesium, nitrate, potassium, silica, sodium, and sulfate.

² Includes the following: antimony, arsenic, beryllium, cadmium, chromium III, chromium VI, copper, cyanide, lead, mercury, nickel, selenium, silver, thallium, zinc.

INDUSTRIAL STORM WATER MONITORING

At **each** location where storm water exits the property, the Discharger shall sample the storm water discharge for the following parameters:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
pH	pH units	Grab	Twice during wet season ¹
Total Suspended Solids	mg/L	Grab	Twice during wet season ¹
Electrical Conductivity	umhos/cm	Grab	Twice during wet season ¹
Oil and Grease	mg/L	Grab	Twice during wet season ¹
Chemical Oxygen Demand	mg/L	Grab	Twice during wet season ¹
Tannins and Lignins	mg/L	Grab	Twice during wet season ¹

¹ First sample shall be collected within an hour of the the first discharge of the wet season. The second sample shall be collected anytime thereafter.

Results shall be reported annually by **1 July** of each year. The Discharger shall complete in entirety the Annual Report Form required under the General Industrial Storm Water Program. All observations and documentations required in the Annual Report Form shall be included.

RECYCLE PONDS AND ASH SETTLING POND MONITORING

Each recycle pond shall be monitored as follows and information shall be submitted monthly:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Freeboard	Feet, inches	Staff Gauge	Weekly
Settled Matter Depth	Feet, inches	Visual	Monthly

The date of the last cleaning and the estimated date of the next cleaning of each recycle pond as well as the ash settling pond shall also be documented in each monthly monitoring report.

ABOVEGROUND PETROLEUM STORAGE MONITORING

The Discharger shall visually inspect the aboveground petroleum storage tanks, as required by the facility's Spill Prevention Control and Countermeasure Plan. A report of the inspection shall be submitted. In the event of a petroleum release, a report shall be submitted describing the corrective action that was taken to remediate and dispose of the contaminated area. The results shall be submitted with the monthly monitoring report.

REPORTING

Unless otherwise specified, monitoring results shall be submitted to the Regional Board by the **1st day of the second month** following sample collection. (i.e., the January report is due by 1 March).

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

The Discharger shall also submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Tabular data shall also be submitted electronically at this time. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements. Annual reports shall be submitted by **1 February of each year**.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provisions D.6.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

30 January 2004

(Date)

MEW:

INFORMATION SHEET

ORDER NO. R5-2004-0012
COLLINS PINE COMPANY
CHESTER SAWMILL
PLUMAS COUNTY

GENERAL INFORMATION

The Collins Pine Company operates a sawmill and cogeneration plant in the community of Chester, Section 7, T28N, R7E, and Section 12, T28N, R6E, MDB&M. The facility was originally constructed in 1943 and consists of a sawmill, planing mill, wood fired steam-generating power plant, and wet and dry decks for log storage. The sawmill and planing mill were modernized in 2002.

The sawmill produces approximately 120 million board feet of lumber per year. During peak summer production, the cogeneration plant produces a gross 12-megawatts (MW) of electric power, and a net 6-MW, which are sold to a utility company. Approximately 135 people are employed during at full operation. During non-peak periods, the production and consumption rates are reduced. The facility is bordered by Stover Ditch to the north, Highway 36 to the south, an open gravel field to the west, and a residential community to the east. The Discharger owns three adjoining parcels of land totaling 450 acres. The sawmill and power plant comprise approximately 100 acres.

Wastes generated at the facility include cooling tower blowdown water, electrostatic precipitator water, boiler mud drum blowdown water, boiler steam drum blowdown, compressor cooling water, feedwater pump cooling water, demineralizer and reverse osmosis concentrate (brine) front ash hopper overflow, ash, wood waste, and storm water runoff.

A gravel pit located to the west of the facility is still mined by the discharger. Extracted sand and gravel is used onsite in concrete.

Storm Water and Surface Water

Approximately half of the 100-acre sawmill and powerplant facility is paved. The 40-acre log deck, one-third of which is paved, is graded such that all storm water from the log deck is directed to the two recycle ponds totaling 3 acres, located at the northern portion of the facility. The ponds are divided by gated culverts so that during winter operations, storm water can be isolated from recycle water. During winter months, excess water from the recycle pond is pumped to the gravel percolation/retention pond (gravel pit) west of the facility on property owned by the Discharger. The remaining runoff from the planing mill, the sawmill, and the kilns are directed via site grading and a storm drainage system either to the eastern portion of the facility, where it percolates on-site, to the south western corner of the property where it exits via a drainage ditch, or to the southern portion of the facility where it exists the site via a drainage ditch that flows along the southern boundary eastward to a drainage swale.

The facility is in the Feather River Hydrologic Unit, Mount Harkness Hydrologic Subarea (No. 518.44), as depicted on interagency hydrologic maps prepared by the Department of Water

Resources (DWR) in August 1986. The average annual precipitation in Chester is approximately 30 inches, and average annual evaporation is 40 inches.

Groundwater

Shallow groundwater is estimated to be approximately 10 feet below the ground surface (ft bgs), with shallower perched conditions during the spring snow melt. The ground surface generally consists of large coarse gravels and cobbles. Standing water in the gravel pit at the western portion of the facility confirms the presence of shallow groundwater. There are no groundwater monitoring or production wells located on-site.

Four lysimeters and three groundwater monitoring wells were located around a former on-site landfill. Water level data from these locations suggests that groundwater flows southeasterly during the wet season, and southwesterly during the dry season. The landfill was clean-closed in 1996 and the wells and lysimeters were abandoned shortly thereafter.

There are three deep production wells in the Chester community operated by the Chester Public Utilities District. Static water level is approximately 27 ft bgs, and total depth ranges from 300 to 400 ft bgs. The closest production well is approximately half a mile southeast of the Collins Pine facility. Boring logs of these wells indicate that the subsurface consists of gravel and rock to approximately 120 ft bgs and intermittent lenses of clay and volcanic rock to approximately 220 ft bgs. The region does not overlie a defined groundwater basin, but groundwater generally collects within permeable zones of sedimentary formations, cracks, and fractures of basaltic hardrock, and permeable zones of granular volcanics.

Mill Operations

The mill consists of log scales, wet and dry log storage, a mechanical log de-barker, one saw mill, one planing mill, thirteen kilns, both paved and unpaved lumber storage areas, a paved wood fuel storage area, aboveground petroleum storage areas, equipment fueling and maintenance areas, paved and unpaved roadways, and an office. Wood waste from the sawmill is delivered to the cogeneration power plant by conveyor for use as fuel. The sawmill was out of operation from January to August 2002 while it was upgraded.

The Discharger operates a closed-looped recycle sprinkling system on a 40-acre log deck, one third of which is paved. The Discharger is considering paving an additional third. No water from this recycle system is discharged off-site. The recycle system includes two log deck recycle ponds totaling approximately three acres. The ponds are divided by gated culverts so that storm water runoff can be isolated from recycle water during fall operations. Excess log deck runoff and storm water runoff is discharged to the gravel retention percolation pond (gravel pit) west of the facility.

Annually, approximately 70-million board feet of logs are stacked on the log decks. During the dry summer months, the logs are sprinkled with water to prevent the development of blue stain and end checking. Excess log deck runoff drains to the two recycle ponds. Makeup water is provided by the freshwater storage pond during the summer months. Sprinkling is discontinued during the winter months.

Log deck runoff contains bark, sawdust, tannins and lignins, dissolved organics, settleable, and suspended solids. Settled matter is rarely removed from the recycle pond bottoms. Instead it is generally flushed in the winter when excess storm water is discharged to the gravel percolation area.

In April 2000, Regional Board staff observed discharge of log deck recycle water from the log deck pond to a wetlands area tributary to Stover Ditch. This discharge was a violation of Waste Discharge Requirements and an Administrative Civil Liability was imposed. The Discharger agreed to pay a fine and provide restoration and improved habitat in the ditch between Stover Ditch and the fire pond. As a result of the dredging, rip-rap, and installation of small pools, fish are now observed this area of the ditch. The Discharger also installed conveyance to transfer storm water runoff from the recycle pond to the gravel retention/percolation pond (gravel pit) west of the facility.

Power Plant Operations

Wood waste from the sawmill is utilized for fuel in the cogeneration power plant. The power plant operates 24 hours per day 7 days per week. Maintenance, which lasts between 7 and 14 days, is scheduled in April and November of each year. However, the plant was out of service from January to May 2002. During that time improvements were made to the quench chamber and the electrostatic precipitator.

The Discharger diverts up to 3 million gallons per day (mgd) of water from the North Fork Feather River for use. The routing of water through the facility is summarized below:

- At the firepond head gate, water is diverted between the fire pond (for use in the mill and plant) and Stover Ditch. Overflow from the fire pond, which is not used in the mill or plant, drains to the eastern drainage ditch which ultimately joins with Stover Ditch. No sawmill or power plant pollutants are discharged to the fire pond.
- Downstream in Stover Ditch, some water is diverted to the freshwater pond, at the freshwater pond head gate. This freshwater pond, commonly referred to as the "Fergosi Pond", supplies makeup water to the log deck recycle pond during the summer. It is a flow-through pond, which drains back into Stover Ditch. In the summer, algae growth in this pond is high and temperature of discharge from the pond is elevated. The freshwater pond provides habitat to beavers and waterfowl.

- Approximately 780,000 gallons per day (gpd) of water is pumped from the fire pond for use in the power plant and sawmill. Water use through the plant and sawmill is summarized below:
 - **Demineralizer.** Until August 2003, the demineralizer had been the primary process water treatment method. Approximately 40 gpm of treated water was polished with sand filtration followed by cation/anion exchange resins. Sand filter backwash was discharged to a sump, which drains into a settling pond. Regeneration of these resins was performed on-site approximately every 3 days. Approximately 5000 gallons of spent reject water were produced during each regeneration, neutralized with acids or bases, and discharged to the settling pond.
 - **Reverse osmosis system.** In August 2003, the Discharger installed a reverse osmosis system. At optimum operating conditions, it will treat approximately 70 gpm of water, generating 45 gpm of permeate (treated water) and 25 gpm of concentrate (brine). Since it currently treats only approximately 35 gpm during cold weather conditions, the Discharger is considering installing a heat exchanger to improve operating conditions. The Discharger will abandon the demineralizer unit when the reverse osmosis system is fully operational, which is expected to be in Spring 2004.
 - **Boiler.** Water that has been treated is stored in a storage tank and then metered into the de-aerator (DA) tank prior to use in the boiler. The boiler generates steam for the 12-MW turbine generator. Steam from the turbine generator is subsequently used in the dry kilns and other parts of the sawmill and plant. Condensed steam is recycled back to the DA tank for reuse in the boiler. A low, continuous volume of boiler blowdown water is discharged to the settling pond. This wastewater is generally high in total dissolved solids and would also contain chemicals used to control scale and slime growth. The mud drum also discharges ash-laden blowdown water to the settling pond.
 - **Cooling Tower.** Approximately 290 gpm of water is used for cooling. Water is routed through the generator air cooler, the generator oil cooler, and finally the cooling tower. Some water is lost to evaporation and the remainder is discharged as blowdown water to the settling pond. Discharge from the cooling towers is generally high in total dissolved solids, and would also contain chemicals used to control scale and slime growth.
 - **Wet Electrostatic Precipitator.** Approximately 400 gpm of water is used in the wet electrostatic precipitator, clarifier, and pre-quench chamber. Settling of ash is aided with the addition of polymers. Wastewater from the electrostatic precipitator, which contains ash and polymers, is discharged to the settling pond.

- **General Plant Uses.** Approximately 50 gpm of water is used for general plant operations including: plant air compressors, front ash hopper seals, and plant floor cleaning. This discharge may contain ash, petroleum, and chemicals.

All water from these processes is discharged to the ash settling pond.

Overflow water from the fire pond and the ash settling pond commingles in the eastern drainage ditch prior to discharge to Stover Ditch at latitude 40° 18' 30" and longitude 121° 14' 30". Order No. 97-117 identified Discharge 001 to be in the eastern drainage ditch immediately downstream of the point where the ash settling pond drains into the eastern drainage ditch. However, overflow water from the fire pond is excess water diverted from the North Fork of the Feather River (and not process water) and fish have been observed in the eastern drainage ditch upstream of the ash settling pond discharge. This Order revises Discharge 001 to be the location where discharge from the ash settling pond enters the eastern drainage ditch.

Materials Management

The Discharger operates an equipment maintenance shop which has two oil/water separators attached to steam cleaning racks. Surface drainage from the oil/water separators runs along the east side of the equipment yard and discharges approximately 100 feet outside the fence. This area is on the Discharger's property.

A 23,000-gallon above ground diesel tank, 14,000-gallon aboveground diesel tank, 14,000-gallon above ground gasoline tank, and 200-gallon lubricating oil tanks are located at the tank farm area. Other fuels, oils, and chemicals are stored at various facility locations. All the tanks at the facility are protected by roof coverings and secondary containment. These tanks have been registered with the State Water Resources Control Board Aboveground Fuel Storage program. The tanks have block and concrete containment structures around them. A Spill Prevention Control and Countermeasure Plan, stamped by a registered civil engineer, was prepared in July 2001. Material Safety Data Sheets are available for all chemicals stored at the facility

Wood ash is removed from the system in a wet electrostatic precipitator and ash clarifier. The ash is collected, stored temporarily on company land west of the mill and then applied on Collins Pine timberlands in Plumas County as soil amendment during the spring, summer, and fall. The ash storage area is unpaved. Between 150 to 225 cubic yards of ash are generated each month, averaging approximately 2,250 cubic yards per year. The following compounds were measured in ash sampled in July 2002 (using waste extraction tests with deionized water as the extractant):

<u>Compound</u>	<u>Concentration Range</u> <u>(ug/L)</u>	<u>Threshold Limits (Basis)</u> <u>(ug/L)</u>
Aluminum	5,700	1,000/200 (Primary/Secondary MCL)
Barium	1,600	1,000 (Primary MCL)
Hexavalent Chromium	22	0.2 (Public Health Goal)
Sodium	46,000	2,000 (Health Advisory or SNARL ¹)
pH	11.9	6.5 to 8.5 (Secondary MCL)

¹Health Advisory or SNARL: Drinking water health advisory or suggested no-adverse response level for toxicity other than cancer risk

There is concern that inorganics may leach into groundwater during the rainy season. The Discharger has agreed to pave the ash storage area, reduce the volume of ash stored on-site during the winter/rainy season, and cover the ash piles under tarps and/or within buildings.

From 1973 to 1992, the Discharger operated a 5-acre landfill for the disposal of ash and wood waste. In 1993, the Discharger removed and recycled the contents and the site was clean-closed.

Domestic wastes generated from the sawmill and powerhouse are discharged to a septic tank/leachfield systems at the facility. This system was installed in 2002. The Discharger plans to pump this system every 2 to 3 years. Domestic wastes generated from the main office are routed to the Chester wastewater treatment plant. This includes wastes from the bathrooms and break areas in the main office.

REASONABLE POTENTIAL ANALYSIS for PRIORITY POLLUTANTS

Federal regulations contained in 40 CFR 122.4 (d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard. USEPA adopted the National Toxics Rule (NTR) on 5 February 1993 and the California Toxics Rule (CTR) on 18 May 2000. The NTR and CTR contain water quality standards applicable to this discharge. The State Water Resources Control Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Plan or SIP), which contains guidance on implementation for the NTR and CTR.

The Discharger sampled the effluent and receiving water on 20 May 2001, 15 July 2002, and 25 November 2002 to determine if the priority pollutants established in the CTR and NTR were detected. During the first sampling event, combined effluent from both the ash settling pond and the fire pond were sampled. However, because the fire pond only receives flow-through water diverted from the Feather River (no process water), Regional Board staff requested that only discharge from the ash settling pond be sampled during the second and third sampling event. All

samples were analyzed for volatile substances, semi-volatile substances, pesticide compounds, metals, asbestos, and dioxins.

Volatiles, Semi-Volatiles, and Pesticides. With one exception, priority pollutant organic substances were not detected in the effluent samples at concentrations that will cause or contribute to a violation of any applicable water quality criteria contained in the Basin Plan. In the July 2002 effluent sample, bis-(2-ethylhexyl)phthalate was detected once but not quantified above the laboratory minimum level of quantitation of 5 ug/L. The laboratory concentration estimate was 2 ug/L. The human health water quality criteria based on risk from the consumption of water and organisms is 1.8 ug/L. However, since bis-(2-ethylhexyl)phthalate was not measured during the 20 May 2001 and 25 November 2002 sampling events, and since the one detection was an estimate barely above water quality criteria, bis-(2-ethylhexyl)phthalate does not appear to have a reasonable potential to impact water quality. However, this Order requires additional sampling to confirm this determination.

For several parameters, water quality criteria have been established at concentrations less than laboratory detection limits. Based on current operations, it is reasonable to assume that these remaining constituents will not cause or contribute to violations of water quality criteria either. By the time this Order expires, lower laboratory detection limits may be possible. In addition, facility operations could change and priority pollutants currently non-detectable in the effluent could be found. Therefore, these requirements include monitoring for metals, volatile substances, semi-volatile substances, and pesticides prior to permit renewal.

Priority Pollutant Inorganics. With the exception of cyanide, the priority pollutant inorganics listed in the CTR were not detected in the effluent and receiving water samples at concentrations above water quality criteria. Based on analytical data and the Discharger's commitment to maintaining and regularly cleaning the ash settling pond, it is reasonable to assume that arsenic, antimony, beryllium, cadmium, chromium, hexavalent chromium, copper, lead, nickel, selenium, silver, thallium, and zinc will not be detected in the discharge at concentrations that will cause or contribute to a violation of any applicable water quality criteria contained in the Basin Plan.

The freshwater criterion continuous concentration for cyanide, which is the highest concentration to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects, is 5.2 ug/L. The freshwater criterion maximum concentration for cyanide, which is the highest concentration to which aquatic life can be exposed for a brief period of time (1-hour) without deleterious effects, is 22 ug/L.

Low-level cyanide analysis of the effluent and receiving water was performed four times from 2001 to 2003. Of those four events, cyanide was detected only once above water quality criteria in the effluent and receiving water. Subsequent internal waste stream sampling was also performed. Results of all cyanide sampling events are summarized in the table below.

Cyanide Water Sampling Results (ug/L)
Collins Pine, Chester Sawmill, Plumas County

	Settling Pond Inlet	Settling Pond Outlet	Discharge 001	Upstream Receiving Water	Downstream Receiving Water
5/20/01	-	-	<2.0	<2.0	-
7/15/02	-	-	2 (14) ¹	<2.0	-
11/25/02	-	-	3 (19) ¹	3 (21) ¹	-
2/17/03	-	-	14 ²	11 ²	-
5/14/03 ³	21	<20	<20	<20	<20
5/21/03 ³	<20	<20	<20	<20	<20

¹ Values in parentheses were cyanide concentrations originally reported by the analytical laboratory. In December 2003, the laboratory informed Regional Board staff that the original results were reported in error. Actual corrected results are provided in **bold**.

² The analytical laboratory has confirmed that the 17 February 2003 results are correct.

³ A reporting limit of 20 ug/L was used for samples collected in May 2003.

“<20” indicates that cyanide was not reported to be present greater than 20 ug/L during that sampling period.

Receiving water samples represent samples from the Feather River upstream of the facility where water is diverted for use in the power plant. Since the Feather River is also the source of the intake water, the receiving water results are also representative of intake water quality. Effluent samples represent discharge from the ash settling pond. Ash was sampled in July 2002. Cyanide was not detected above 0.5 mg/kg in the ash, or above 5 ug/L in ash leachate (using waste extraction tests with deionized water as the extractant). Based on available facility information, cyanide and cyanide-containing products do not appear to be used or generated at the facility.

Based on the data collected, it is unclear whether the discharge has a reasonable potential to cause an in-stream excursion of water quality criteria for cyanide:

- Of the four low-level cyanide sampling events, in only one was cyanide measured above water quality goals in either the receiving water or the effluent. In the remaining three sampling events, cyanide was not measured above water quality goals in either the receiving water or the effluent.
- In the May 2003 sampling events, several non-detect results were reported. However, the reporting limit used was too high to confirm the presence or absence of cyanide (i.e. the reporting limit used was 20 ug/L and the water quality goal is 5.2 ug/L so non-detect results were inconclusive).
- The laboratory that performed the low-level analysis had admitted to making several errors in reporting the Discharger’s data, as summarized in the table above. Additionally,

cyanide performed by the same laboratory for a different cogeneration facility had also had serious quality control/quality assurance problems (in one case the laboratory reported 24 ug/L of cyanide on a blank standard)

For these reasons, cyanide effluent limitations are not included. The Discharger needs additional time to collect data in order to determine the presence or absence of cyanide in the effluent and/or intake water. This Order requires the Discharger to sample the effluent and intake water (which shares the same source as the receiving water) monthly for a minimum of one year. Based on the results of this study, this Order may be reopened for the inclusion of cyanide effluent limitations and/or intake water credits.

Asbestos. Asbestos fibers were not detected in the discharge or receiving water above the reporting limit of 0.023 million fibers per liter (MFL). The water quality objective for asbestos is 7 MFL. Based on facility operations and analytical data, it is reasonable to assume that asbestos will not be detected in the effluent at concentrations that will cause or contribute to a violation of applicable water quality standards described in the Basin Plan.

2,3,7,8-TCDD and 2,3,7,8-TCDD Congeners. The priority pollutant 2,3,7,8-TCDD was not detected above the method detection limit of 1.4 pg/L in the three effluent samples that were submitted by the discharger. The concentration associated with the human health water quality criteria based on risk from the consumption of water and organisms is 0.013 pg/L.

Additionally, none of the seventeen 2,3,7,8-TCDD congeners were detected in the effluent. The SIP requires the Regional Board to submit congener information to the State Water Resources Control Board.

BASIS FOR PERMIT CONDITIONS

Since biomass is the only fuel source for the power plant, effluent limitations established in the Code of Federal Regulations, Steam Electric Power Generating Point Source Category (40 CFR 423) are not applicable to this facility. Logs are stored at the facility. Water is sprayed on the logs; therefore, effluent limitations established in Timber Products Processing Point Source Category, Wet Storage Subcategory (40 CFR Part 429, Subpart I) are applicable.

Discharge Prohibitions

The Basin Plan provides that all waters shall be maintained free of toxic substances. Water treatment chemicals used in maintaining the water quality within the boiler and cooling tower may cause toxicity to aquatic life. The Order prohibits the discharge of hazardous or toxic substances (including water treatment chemicals) to surface waters or drainage courses.

The Basin Plan states that surface water shall not cause oils, greases, or other materials in concentrations that cause nuisance or result in a visible film or coating on the surface of the

water. This Order prohibits the discharge of petroleum products (including oil, grease, gasoline, and diesel) to surface waters or surface water drainage courses. As established in the previous Order, the discharge of leachate from wood fuel stockpiles to surface waters is prohibited.

Effluent Limitations

Based on long-term monitoring submitted by the Discharger the discharge has reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard for settleable solids, suspended solids, pH, specific conductance, chemical oxygen demand, and acute toxicity.

Effluent limitations have been established for all pollutants that have a reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality objective. The basis for the effluent limitations established in this Order are providing in the following paragraphs.

Settleable Solids. The Basin Plan states that waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. The Order contains 30-day average and daily maximum settleable solids limits of 0.1 ml/L and 0.2 ml/L respectively. The settleable solids limits in this permit are based on what can reasonably be achieved in well-designed, constructed and operated settling ponds. These limits are consistent with the previous Order.

Suspended Solids. The Basin Plan states that waters shall not contain suspended material in concentrations that cause nuisance or adversely affects beneficial uses. The Order contains a daily maximum suspended solids limit of 40 mg/L, which is consistent with the previous Order.

Specific Conductance. The California Secondary Maximum Contaminant Level for specific conductance is 900 mg/L. Since municipal and domestic supply beneficial uses apply to the receiving water this Order limits the daily maximum specific conductance concentrations to 900 mg/L. Effluent limitations for specific conductance had not been included in the previous Order.

Chemical Oxygen Demand. The Order contains a daily maximum chemical oxygen demand of 40 mg/L, which is consistent with the previous Order.

pH Limits. This Order requires the effluent pH to remain between 6.0 and 9.0 units. These limits are consistent with the limits in the previous Order and Timber Products Processing Point Source Category, Wet Storage Subcategory (40 CFR Part 429, Subpart I).

Acute Toxicity Limits. The effluent generally consists of blowdown wastewater, water treatment process water, ash, and storm water. This Order contains effluent limits and monitoring requirements for acute toxicity, which is consistent with the previous Order. Chronic

toxicity has also been added, which is consistent with the monitoring and reporting programs of similar facilities.

Discharge Specifications. The recycle ponds receive storm water runoff from the log deck recycle system, therefore a minimum two feet of freeboard shall be maintained during the rainy season. However, since the ash settling pond receives only very limited storm water runoff only one foot of freeboard is required during the rainy season.

Provision G.7. The presence or absence of cyanide in the effluent and receiving water is unknown. Should the presence of cyanide in the effluent be confirmed, the Discharger will need to determine whether cyanide is added in their process or is present in their intake water from the Feather River. This Order requires the Discharger to perform the following to determine the presence or absence of cyanide in the effluent and intake water:

- Within **3 months** of adoption of this Order, submit a *Cyanide Sampling and Analysis Plan* to investigate the presence or absence of cyanide in the effluent and intake water.
- Implement all activities described in the *Cyanide Sampling and Analysis Plan*.
- Perform concurrent monitoring of intake, effluent, and upstream and downstream receiving water in accordance with the Monitoring and Reporting Program No. R5-2004-0012.
- Submit *Cyanide Sampling Summary Report* within **24 months** of adoption of this Order. The report shall summarize available data and attempt to determine whether cyanide is presence or absent in the effluent and the intake water. Should cyanide be presence in either, this Order may be reopened and effluent limits and/or intake credits for cyanide may be included

Provisions G.8, G.9, and G.10. Resolution No. 68-16 requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the state unless it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., constituent concentrations that exceed water quality objectives). The Regional Board has considered Resolution No. 68-16 and finds that the current discharge may be inconsistent with this policy, and could cause an increase in groundwater constituent concentrations above water quality objectives, specifically: pH, specific conductance, total dissolved solids, and inorganics (including metals). Additionally, it has not been demonstrated that degradation of groundwater by this discharge is consistent with maximum benefit to the people of the State. Therefore to assure that the discharge, as permitted herein, is consistent with Resolution No. 68-16, the Discharger is required to propose and fully implement Best Practicable Treatment or Control (BPTC) measures so that the discharge does

not create a condition of pollution or nuisance and that the highest water quality will be maintained.

Ash characterization performed by the Discharger in July 2002 shows that leachate from the unpaved ash storage has a reasonable potential to impact the underlying groundwater. The unlined recycle ponds and unlined ash settling pond also have a reasonable potential to impact the underlying usable groundwater. The potential impacts on usable groundwater and the appropriate level of degradation that complies with Resolution No. 68-16 have not been fully evaluated. The Discharger's current effort does not constitute BPTC as intended in Resolution No. 68-16.

In accordance with Provision G.8, the Discharger intends to pave the ash storage area, reduce the volume of ash stored on-site during the winter/rainy season, and cover the ash piles under tarps and/or within buildings. Pursuant to Provision G.9, this Order also establishes a schedule of tasks to evaluate BPTCs for the remaining storage and disposal components at the facility. Completion of these tasks, and implementation of the approved strategies will ensure that BPTC and the highest water quality consistent with maximum benefit to the people of the State will be achieved. Should full BPTC implementation not be performed, the Regional Board may reopen this Order to reconsider groundwater limitations, groundwater monitoring, and other requirements to comply with Resolution No. 68-16. Accordingly, the discharge is consistent with Resolution No. 68-16.

Monitoring and Reporting

Aboveground Petroleum Storage. This visual monitoring is added to determine compliance with the facility's Spill Prevention Control and Countermeasure Plan.

Precipitation. This monitoring is added to determine when the effluent contains storm water.

Recycle Ponds and Ash Settling Pond. Freeboard monitoring is required to determine compliance with Discharge Specification C.3.

Effluent (Discharge 001). Effluent monitoring for pH, specific conductance, suspended solids, and settleable solids is required to determine compliance with Effluent Limitations B.1 and B.3. Turbidity, tannins and lignins, and oil and grease monitoring are continued from the previous order. Temperature monitoring has been removed since the Discharger already monitors the receiving water for temperature. Chemical oxygen demand has been reduced from weekly to monthly since no chemical oxygen demand violations have occurred previously. Acute toxicity monitoring has been reduced from monthly to twice yearly since no toxicity violations had occurred and the Discharger's fire pond and Stover Ditch are habitat to fish. Monthly monitoring of cyanide has been added in accordance with Finding No. 24. Annual monitoring of general minerals and priority pollutants inorganics has been added to determine impacts of the ash settling pond on the discharge. Dissolved oxygen monitoring has been removed since there have been no odor nuisance complaints regarding the pond systems.

Chronic Toxicity. Order No. 97-117 did not require chronic toxicity testing, and chronic toxicity testing has not been performed in the past 5 years from discharge from the facility. Therefore, this Order requires chronic toxicity monitoring to be performed annually. Sampling shall be representative of discharge from the ash settling pond under typical operating conditions. The frequency may be reduced if no chronic toxicity is exhibited during the first two years of testing upon approval by the Executive Officer.

Receiving Water. Visual monitoring of the receiving water continues from the previous Order. Monitoring of Stover Ditch at Highway 36 has been eliminated since receiving water problems have not been observed at that location. Receiving water monitoring for dissolved oxygen, pH, and temperature is continued to determine compliance with Receiving Water Limitations E.1, E.7, and E.9. Monitoring for turbidity and specific conductance is added to determine compliance with Receiving Water Limitations E.6, and E.11. Temperature monitoring at the discharge of the fresh water pond has been added to evaluate potential R-2 temperature problems.

Ash. Ash monitoring was not required in Order No. 97-117. Due to impacts of ash on groundwater at other facilities, the Regional Board had requested that the Discharger sample ash for general minerals, priority pollutant metals, aluminum, barium, boron, cobalt, iron, manganese, molybdenum and vanadium. Analysis of ash leachate determined the presence of aluminum, barium, hexavalent chromium, sodium, and pH above water quality goals. Additionally, total aluminum, chromium, copper, iron, lead, manganese, nickel, sodium, and vanadium, and zinc were measured in the ash. This Order requires ash monitoring since fluctuations in ash content are possible but have not historically been measured. The Discharger is required to sample ash annually. Dioxin analysis is required once within the first year of Order adoption. The Discharger is requested to analyze for soluble constituents to determine potential impacts to groundwater, and total constituents as well as moisture content to determine contaminant loading rates at soil amendment application areas.

Storm Water Monitoring. Storm water exits the site in at least two locations: at the southwestern corner and along a drainage ditch that parallels the railroad tracks south of the facility. This Order includes sampling these storm water discharge locations, as well as storm water that exits the facility elsewhere, for chemical oxygen demand, oil and grease, pH, specific conductivity, total suspended solids, and tannins and lignins. Sampling shall be performed twice during the wet season. The first sampling event shall be performed within one hour of the first runoff from the first storm. The second sampling event shall be performed anytime thereafter.

Priority Pollutant Monitoring. Federal regulations contained in 40 CFR 122.4 (d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard.

This Order requires monitoring to determine if the discharge contains priority pollutants identified in the CTR and NTR. In May 2001, the Discharger collected receiving water samples and discharge samples and submitted them for priority pollutant and dioxin analysis. The discharge samples were collected from the eastern drainage ditch at the confluence of the ash settling pond discharge and the fire pond discharge. Since the fire pond discharge is overflow diverted water that does not contain pollutants from the saw mill or powerplant, and fish have been observed in the eastern drainage ditch, the Regional Board staff requested that subsequent discharge samples be from the ash settling pond. A second set of discharge and receiving water samples were collected in July 2002.

This Order requires two additional sampling events be performed. However, the Discharger is not required to perform additional asbestos sampling because it has been determined that asbestos does not have a reasonable potential to cause or contribute to a violation of applicable water quality standards. The first sampling event shall be performed by August 2004. If after a review of the monitoring results, it is determined that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above water quality objectives, this Order will be reopened and limitations based on those objectives included. The second sampling event shall be performed before the next permit renewal process.

RECEIVING WATER LIMITATIONS

The receiving water limitations contained in this Order are based on water quality objectives contained in the Basin Plan for the Feather River and Lake Almanor.

PROCEDURES ON REACHING FINAL DECISION ON DRAFT PERMIT

The tentative waste discharge requirements have been sent to the Discharger and interested parties for review (at least 30 days) prior to formal presentation to the Regional Board. Any contested items on the permit will be heard and considered for change prior to formal adoption at the Board Meeting.

FOR FURTHER INFORMATION

For further information or questions regarding the NPDES permit, contact Mew Wong at the Regional Water Quality Control Board in Redding at (530) 224-4788.

MEW: 30 January 2004