

CHAPTER 4-6 MINING PRACTICES WATER QUALITY

4-6-1 Findings

The exploration for the mining of minerals and the implementation of Best Management Practices (“BMPs”) are necessary and proper activities to provide for Tribal economic security while protecting Reservation resources and the health, safety and welfare of the Reservation population. The economic goal of providing for the exploration for and mining of minerals is compatible with the environmental goal of providing for reclamation of lands affected by such activities and protection of the Reservation population. Since exploration and mining activities extend over along period of time and may have irreversible impacts, preventative rather than corrective or remedial measures are a more effective and more economical way to control adverse water quality impacts which may be associated with exploration and mining activities. The BMP which requires project proponents to step toward effectively managing non-point sources of water pollution which result from mineral exploration and mining activities. The coordinated management of all mining of minerals on the Colville Reservation through implementation of this Chapter is necessary to protect the economy, health, safety and welfare of the Reservation population and to protect the authority of the Confederated Tribes of the Colville Reservation to effectively govern the Reservation for these purposes.

(Amended 9/2/10, Certified 9/9/10, Resolution 2010-620)

4-6-2 Definitions

For the purpose of this Chapter the following words and phrases shall have the meaning ascribed to them in this section.

- (a) “Chapter” means the Colville Mining Practices Water Quality Chapter of this Code.
- (b) “Affected Lands” means the surface and subsurface areas on the Colville Indian Reservation where any prospecting, exploration or mining operation is or will be conducted, including, but not limited to: on-site private ways, roads, and railroads, lines appurtenant to any such area; land excavations; prospecting sites; drill sites or workings; refuse banks or spoil piles; evaporation or settling ponds or lagoons; leaching dumps; placer areas; tailings ponds or dumps; work, parking, storage or waste discharge areas; areas in which structures, facilities, equipment, machines, tools or other material, or property which result from or are used to such operations are situated.
- (c) “Borrow pit” means any excavation site outside the limits of construction providing material necessary to that construction, such as fill material for embankments.
- (d) “Chemicals” means substances whether liquid, gaseous or solid which when applied by any person may present hazards to either human health or the Reservation environment.
- (e) “Colville Environmental Quality Commission” or “CEQC” means the environmental administrative appellate body of the Confederated Tribes of the Colville Reservation provided for in Chapter 4-23 of the Colville Tribal Code.

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- (f) “Contamination” means the introducing by any means of any substance in liquid, solid or gaseous form into or upon Reservation resources in sufficient quantities as may be directly or indirectly injurious to the health, safety or welfare of the Reservation population as a result of domestic, commercial, industrial, agricultural or recreational activities or which may be directly or indirectly injurious to livestock, wildlife, fish or aquatic life and their habitat.
- (g) “Department” means the Environmental Trust Department of the Confederated Tribes of the Colville Reservation.

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- (h) “End hauling” means the removal and transportation of excavated material, pit or quarry overburden, or road cut material from the excavation site to a deposit site not adjacent to the point of removal.

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- (i) "Erodible soils" means those soils exposed or displaced by mining activities that may be readily moved by water.
- (j) "Exploration" means the act of searching for or investigating a mineral deposit and includes but not limited to sinking shafts, tunneling, drilling core and bore holes, and digging pit or cuts and other works for the purpose of extracting samples prior to commencement of development or extraction operation, and the building of roads, access ways and other facilities related to such work..
- (k) "Flood level-fifty (50) year" shall refer to an additional vertical water height above the ordinary high watermark, such additional water height above the ordinary high watermark, such additional height being 125% of the vertical distance between the average streambed and the ordinary high watermark; and an additional horizontal distance which shall not exceed two (2) times the ordinary channel width as measured between the ordinary high watermarks and added to each side of the channel, unless a different area is specified by the Department based on identifiable topographic or vegetative features.
- (l) "Flood level-twenty-five (25) year" shall refer to a vertical elevation which is the same height measured from the ordinary high watermark, unless a different area is specified by the Department based on identifiable topographic or vegetative features.
- (m) "Key Wildlife Habitat" means the habitat of any wildlife species which depends on maintenance of water quality in the Streamside Management Zone and adjacent areas or any habitat where a wildlife species helps maintain water quality.
- (n) "Limits of roadway construction" means the area occupied by the completed roadway including the cutback, fill slope, and the area cleared for construction of the roadway.
- (o) "Load bearing" means that part of the road which is supportive soil, earth, rock, or other material directly below the working surface and only the associated earth necessary for support.
- (p) "Major tractor road" means a road that involves extensive side casting or similar disturbance of soil which may cause material damage to a Reservation resource or which may cause material damage to the integrity of a Streamside Management Zone.
- (q) "Mineral" means an inanimate constituent of the earth in a solid, liquid or gaseous state which, when extracted from the earth, is usable in its natural form or is capable of conversion into a usable form as a metal, metallic compound, a chemical, an energy source, or a raw material for manufacturing or construction material.
- (r) "Mining Operations" means the development or extraction of mineral from its natural occurrence on affected land. The term shall be broadly construed to include open mining, surface mining and surface operation, and a disposal of refuse from underground and insitu mining. Moreover, the term means operations on affected lands including: transportation; mining; concentrating; milling; smelting; refining; cleaning; preparation; evaporation; and other processing.
- (s) "Notice to Comply" means a notice issued by the Department which may, among other things , require initiation and/or completion of action necessary to prevent, correct and/or compensate for present or future damage to Reservation resources, or present or future harm to the Reservation population, which has resulted, or which may in the future result, from mining operations.
- (t) "Open mining" means the mining of minerals by removing the overburden lying above such deposits and mining directly from the deposit thereby exposed. The term includes mining directly from such deposits where there is no overburden, mining by auger method, and the production of surface mining refuse. The term also includes, but is not limited to, the following; open cut mining; open pit mining; strip mining; quarrying; placer operations; and the excavation and removal of sand, gravel, clay, rock or other

minerals for the primary purpose of construction or maintenance of roads. Prospecting and exploration activities shall be included within the meaning of this term when the removal of geologic sample materials exceeds a cumulative total in excess of one ton. Open mining shall not include; excavation or grading conducted for farming; on-site construction, but shall include adjacent or off-site borrow pits.

(u) "Operation" means any person, firm, partnership, association or corporation or any tribal, federal, state, county or municipal government or governmental enterprise engaged in or controlling a mining operation.

(v) "Ordinary high water mark" means the mark on the shores of all waters, which may be found by examining the beds and banks and ascertaining where the presence of and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation.

(w) "Overburden" means materials of any nature, consolidated or unconsolidated, which overlay a natural deposit of useful material or ores and such earth and other materials after removal from their natural state in the process of exploration or mining.

(x) "Perennial stream" means any stream or stream segment which normally maintains a surface flow of water year round.

(y) "Permit" means any authorization, license, or other approval action required by this Chapter before any exploration or mining operations may take place.

(z) "Person" means any: individual; association; business; company; joint venture; partnership private, public, tribal, or municipal corporation; tribal enterprise; tribal, state, local governmental entity; or other association of individuals or persons of whatever nature.

(aa) "Prospecting" means the same as exploration.

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(bb) "Reclamation" means the implementation of procedures, during and after an exploration or mining operation, intended to minimize and/or mitigate the disruption of Reservation resources resulting from the operation and to protect Reservation resources and the health, safety, and welfare of future economic interests of the Reservation population by providing for subsequent beneficial use of affected lands through the rehabilitation of plant cover, soil stability, water resource, and other appropriate measures.

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(cc) "Reclamation plan" means the operator's written proposal, submitted to the Department as part of any notice or permit application required by this Chapter.

(dd) "Refuse" means all waste soil, rock, mineral, liquid, vegetation and other material directly resulting from or displaced by the mining, cleaning or preparation of minerals and included all waste or abandoned materials deposited on affected lands from other sources and shall include, but not be limited to, garbage, trash, leftover cable and abandoned equipment and any other materials which may adversely effect or damage Reservation resources or which pose a threat to the health, safety, or welfare of the Reservation population.

(ee) "Relief Culvert" means a structure to relieve surface runoff from roadside ditches to prevent excessive build-up in water volume and velocity.

(ff) "Reservation" means the Colville Indian Reservation.

(gg) "Reservation resource" means air, land, surface, water, groundwater, fish and wildlife, trees and other vegetation, cultural, historic and religious resources and shall also mean capital improvements located within the Colville Indian Reservation.

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(hh) "Reservation population" means all people either residing or otherwise conducting business or other activities on all lands, both trust and fee, within the exterior boundaries of the Colville Indian Reservation.

(ii) "Side casting" means the act of moving excavated material to the side and depositing such material within the limits of road construction or dumping over the side and outside the limits of construction or dumping over the side and outside the limits of construction.

(jj) "Spoil" means any material removed as overburden or mining refuse generated during mining operations, or any excess material removed or generated as overburden or generated during road construction which is not used within the limits of construction.

(kk) "Spoil bank" means a deposit of excavated overburden or mining refuse.

(ll) "Stop Work Order" means the administrative directive issued by the Department pursuant to section 4-6-20 of this Chapter.

(mm) "Streamside Management Zone" means a specified area alongside natural waters where specific attention must be given to the protection of water quality. These zones shall be measured from the ordinary high watermark of the body of water and shall measure one chain (66 feet) in width on each side of Type 1 and Type 2 Waters, and one-half chain (33 feet) in width on each side of Type 3 and Type 4 Waters.

(nn) "Surface mining" means the same as open mining.

(oo) "Temperature Sensitive Waters" means those waters included with water identified on the "Water Type Map," the temperature of which may be adversely affected by the removal of shade producing vegetation to the extent that the fishery resource, water quality, or the Reservation resources may be damaged.

(pp) "Tribe" means the Confederated Tribes of the Colville Reservation.

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(qq) "Walk-on Prospecting" means those casual exploration activities properly authorized by the Department which have the potential for causing little or no surface disturbance and which will not disturb water quality. Examples of such activities are: hand sample collection, geochemical sampling, geologic mapping, geophysical surveys (non-land disturbing), boundary or claim surveying, or location work.

(rr) "Water bar" means a diversion ditch and /or hump in a trail or road for the purpose of carrying surface water runoff into the vegetation duff, ditch, or other dispersion area so that it does not gain the volume and velocity which causes soil movement and erosion.

(ss) "Water Quality Standard" means one of the several parameters used to measure the quality of all surface and ground waters of the Reservation. Water Quality Standards have been established by the Colville Business Council.

4-6-3 Water Categories

(a) The Colville Tribes has classified streams, lakes, and ponds located within the exterior boundaries of the Colville Indian Reservation. These waters have been defined as Type 1, 2, 3, or 4 Waters. Type 1 Waters have been identified on the Water Type Map which is available from the Department determines that they constitute a critically sensitive resource requiring maximum protection and management. When requested by landowners, applicants or other affected persons, the Department shall hold informal conferences, which shall include a representative of the Colville Hydrology Department, and those contesting the proposed water type change.

(b) The four water types have been defined as follows:

(1) "Type 1 Water" means all waters, within their ordinary high-water mark, as identified on the Water Type Map. "Type 1 Water" classification shall be applied to lakes, ponds, marshes, bogs, streams, and stream segment which the Colville Tribes have determined to constitute a critically

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sensitive resources. Such resources may be necessary for the management, utilization, or protection of Reservation lands or waters including, but not limited to:

- (A) Lake, pond, and stream bank protection;
- (B) Major domestic water supplies;
- (C) Tribal and /or public recreation;
- (D) Fish spawning, rearing or migration;
- (E) Wildlife habitat and uses;
- (F) Protection of water quality; and
- (G) Capital improvement.

(2) "Type 2 Water" classification shall be applied to segments of natural waters which:

- (A) Are not classified as "Type 1 Water";
- (B) Are perennial or intermittent streams which have a well defined channel eight (8) feet or greater in width between the ordinary high-water marks along the majority of the length of the stream segments; and
- (C) Are impoundments having a surface area greater than 0.5 acre at seasonal low water.

(3) "Type 3 Water" classification shall be applied to segments of natural water which:

- (A) Are not classified as "Type 1 or 2 Waters";
- (B) Are perennial or intermittent streams which have a well defined channel less than eight (8) feet in width and greater than four (4) feet in width, between the ordinary high-water marks along the majority of the length of the stream segment; and
- (C) Are impoundments having a surface area greater than 0.2 acre, and less than 0.5 acres, at seasonal low water.

(4) "Type 4 Water" classification shall be applied to segments of natural water which:

- (A) Are not classified as "Type 1, 2, or 3 Waters"
- (B) Are perennial or intermittent streams which have a well defined channel less than four (4) feet in width between the ordinary high-water marks along the majority of the length of the stream segment;
- (C) Are impoundment having a surface area less than 0.2 acre at seasonal low waters; and
- (D) Are areas of perennial or intermittent seepage, ponds, marshes, bogs, and drainage ways having short periods of seasonal or storm runoff.

(5) For purpose of this section:

- (A) "Natural Waters" only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.

(B) “Seasonal Low Flow” and “Seasonal Low Water” means the conditions of the seven-day (7), two-year (2) low water situation, as measured or estimated by accepted hydrological techniques recognized by the Department.

(C) Channel width shall be measured over a representative section of at least five hundred (500) lineal feet with at least ten (10) evenly spaced measurement points along the normal stream channel.

4-6-4 Administration

The Colville Tribe Environmental Trust Department shall be responsible for the administration of this Chapter, subject to appellate administrative review by the Colville Environmental Quality Commission (CEQC) as may be provided for by this Chapter, the Colville Administration Procedure Act and Chapter 4-23 of the Colville Tribal Code.

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4-6-5 Water Quality Permits Required—Duration—Renewal

(a) Water quality permits for mining, exploration and prospecting operations on all lands within the Colville Indian Reservation are required as specified in this Chapter for all activities commenced, resumed, modified, or expanded after the adoption of this Chapter; providing that water quality permits under this Chapter are not required for walk-on prospecting as defined in this Chapter by landowners on their own trust or fee land, by Colville Tribal members on Colville Tribal lands or by other persons with a Tribal Walk-on Permit so long as those walk-on prospecting activities involve only casual exploration and do not involve surface or water disturbing activities including but not limited to road building, blasting, drilling, excavation, stream diversion or impoundments.

(b) All water quality permits issued pursuant to this Chapter shall be issued for a term not to exceed five (5) years or so long as may be specified in any other mineral permit issued by the Colville Tribes or Bureau of Indian Affairs. Provisions for permit renewal are set forth in section 4-6-8 of this Chapter.

(c) A water quality permit for exploration operations is a limited authorization and shall not authorize mining operations. At the point at which exploration operations become mining operations, it shall be the responsibility of the operator to apply for and obtain a water quality-mining permit before commencing mining operations.

4-6-6 Special Sand and Gravel Permits—Ten Day Processing

(a) Any sand, gravel, or quarry aggregate operation which is to be operated for the sole purpose of obtaining materials for highway, road utility, or similar type construction under a tribal, federal, state, county, city, town, or special district contract where the contract calls for work to be commenced within a specifically short time and which will affect ten (10) acres or less shall be subject to this section (4-6-6).

(b) The operation shall make written application to the Department for a special permit on forms provided by the Department. The special permit may authorize the operator to engage in such mining operation until such time as the subject governmental contract has been satisfied. Such application shall consist of the following:

(1) Two application forms;

(2) Two copies of an accurate map of the affected land submitted with each of the applications. The map shall show information sufficient to determine the location of the affected land on the ground, streams and other waters, utilities and existing and proposed roads or access routes to be used in connection with the mining operation.

(3) The application fee of two hundred dollars (\$200.00) plus one dollar (\$1.00) per acre affected, unless an application fee has already been paid to the Department in connection with said

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operations; and

(4) A performance bond in an amount determined by the Department.

(c) Each application form shall include:

(1) The name and address of the general office and the local address or addresses of the operator;

(2) The name and address of the owner of the surface of the affected land;

(3) The name and address of the owner of the subsurface rights of the affected land, and where the owner of the subsurface rights and the operator are not one and the same, evidence that the owner of the subsurface has agreed with the operator for the proposed operation;

(4) The approximate size of the affected land;

(5) Information sufficient to describe or identify the type of mining operation proposed and how it would be conducted;

(6) The measures to be taken to comply with the applicable reclamation provisions of this Chapter;

(7) The terms of the governmental contract which make a special permit necessary;

(8) Evidence of any performance bond required under the governmental contract; and

(9) A certificate of compliance by the Colville Planning Committee, that the mining operation would be in compliance with the applicable zoning and subdivision regulations.

(d) Promptly after the completing of reclamation, the operator shall notify the Department that the land has been reclaimed. Upon receipt of the notice that the affected land or portion of it has been reclaimed, the Department shall cause the land to be inspected and shall release the performance bond or appropriate portions thereof within (30) days or as soon thereafter as the Department finds the reclamation to be satisfactory and in accordance with the plan agreed to by the Department and the operator.

(e) The Department shall promptly act upon those special permits so that they may be issued within ten (10) working days of the date that a complete application is submitted. Such timely review by the Department is dependent upon the application, map, fee and performance bond all being in proper order and submitted in compliance with this section.

(f) In the case where the Government or governmental agency, acting as an operator, requires a permit solely for the purpose of mining construction materials for public roads the government or governmental agency may in the Department's discretion be granted a waiver from the requirements of paragraphs (3) and (4) of 4-6-6(b).

4-6-7 Application for Water Quality Permit—Fee—Notice

(a) Any operator desiring to engage in exploration or mining operation within the exterior boundaries of the Colville Indian Reservation shall make written application to the Department for a permit in a form approved by the Department. The water quality permit or acceptable renewal of an existing water quality permit, if approved, may authorize the operator to engage in such exploration or mining operation upon the affected lands as described in the application. Such application shall consist of:

(1) The anticipated dates of the commencement and termination of the operations.

(2) Legal description of the area within which the exploration or mining operation are to be conducted.

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- (3) A topographic map of suitable scale upon which the proposed operation are plotted.
- (4) Description of the proposed methods of exploration or mining, support facilities, and required construction, including:
- (A) Proposed location of drilling, trenching, etc.;
 - (B) Equipment to be used;
 - (C) Location of primary support roads, proposed road construction and road design specifications;
 - (D) Location of any buildings, camps and other facilities and sewage disposal system on the affected lands;
 - (E) Name and location of all streams, lakes, known groundwater deposits, water walls, power and communication lines, and building on or with two hundred (200) feet of the affected lands; and
 - (F) List with addresses of owners of record of the affected lands and of lands adjoining the affected lands.
- (5) The reclamation plan required by this Chapter.
- (6) A basic fee of two hundred and fifty dollars (\$250.00) and, in addition, one dollar (\$1.00) per acre of land to be affected by such permit; Provided, that if the permit applicant has already paid the Department this amount in connection with any other permit pertaining to the proposed operations to be covered by the water quality permit, this fee under this Chapter may either be reduced or waived. If the operator is a government or governmental agency no application, renewal or amendment fee may be required, in the discretion of the Department. In no case shall the fee exceed two thousand dollars (\$2,000), unless otherwise required by this Chapter.
- (7) Information provided the Department in an application for a permit relating to the location, size, or nature of the deposit and marked confidential by the operator shall be protected as confidential information by the Department and shall not be a matter of public record in the absence of a written release from the operator or until such mining operation has been terminated, except to the extent disclosure is required by law.
- (8) Upon the filing of the application for a permit with the Department, a copy of such application shall be available for public inspection at the office of the Department. The information exempted by subsection 4-6-7(7) shall be deleted from such file copies.
- (9) Following the Department's approval as to form, the applicant shall cause notice of the filing of its application with the Department to be published in the Tribal Tribune and one other local newspaper of general circulation in the locality of the proposed exploration or mining operation once a week for four (4) consecutive weeks, commencing not more than ten (10) days after the filing of the application with the Department. Such notice shall contain information regarding the identity of the applicant, the location of the proposed exploration or mining operation. If such information does not violate the provision of subsection 4-6-7(7), the proposed dates of commencement and completion of the operation, the proposed future use of the affected land, the location where additional information about the operation may be obtained, and the location and final date for filing objections with the Department.
- (10) In addition, the applicant shall mail a copy of such notice immediately after first publication

to all owners of the surface rights of the affected land, to the owners of record of immediately adjacent lands, and to any other persons who are owners of record that may be designated by the Department whose lands might be affected by the proposed exploration or mining operation. Proof of such notice and mailing, such as certified mail with return receipt requested where possible, shall promptly be provided to the Department and shall become part of the application.

4-6-8 Renewal or Amendment of Water Quality Permits

An operator may, within the term of a water quality permit, apply to the Department for a permit renewal, or for an amendment to the permit, increasing the acreage to be affected or otherwise revising the exploration or mining operation. Where applicable, there shall be filed with any application for amendment a map and application. The renewed or amended application shall be accompanied by a basic fee of twenty-five dollars (\$25.00) plus one dollar (\$1.00) for each additional acre; Provided, that if the permit holder has already paid the Department this amount in connection with any other permit renewal or revision pertaining to the proposed operation to be covered by the renewed or revised water quality permit, this fee under this Chapter may either be reduced or waived by the Department. A fraction of an acre shall be considered a full acre for the purpose of computing the fee. In addition, a supplemental performance bond, as determined by the Department, for any additional acreage shall be submitted. If the area of the original application is reduced, the amount of the performance bond, in the discretion of the Department, may be reduced. Renewal applications shall contain the information required in the original application if different from that in the original application or renewal. The renewal permit shall show the area to be explored or mined and the area reclaimed since the original permit or the last renewal. Applications for renewal or amendment of a permit shall be reviewed by the Department in the same manner as applications for new permits; in addition thereto a renewal or amendment application may be denied by the Department for one or more of the following reasons:

- (a) The terms and conditions of the existing permit are not being satisfactorily met;
- (b) The existing exploration or mining operation and reclamation operations are not in compliance with the water quality protection standards of Tribal or federal law;
- (c) The renewal requested substantially jeopardizes the operator's continuing responsibilities on existing permitted areas;
- (d) The operator has not provided evidence that the performance bond will continue in full force and effect for any renewal period requested;
- e) The operator has not provided the Department with any additional revised or updated information requested by the Department.

4-6-9 Reclamation Plan Requirements

The reclamation plan required by this Chapter shall be based upon provisions for, or satisfactory explanation of, all general requirements for the type of reclamation proposed to be implemented by the operator. Reclamation shall be required on all the affected land. The reclamation plan shall include the following:

- (a) The statement regarding the condition of the affected lands prior to any exploration or mining including existing uses at the time exploration or mining began; capability of the land prior to any exploration or mining operations to support other uses considering soil characteristics, vegetation, availability of surface and ground water, and topography; and the potential productivity of the land prior to exploration or mining under high levels of management;
- (b) A statement regarding the proposed subsequent use of affected lands after reclamation which is supported by satisfactory evidence that all the owners of a possessory interest in the lands concur with this proposed use;

- (c) Evidence that the proposed subsequent use is lawful under applicable land use and environmental laws;
- (d) A description of the types of reclamation the operator proposed to achieve upon the affected lands and the amount of acreage accorded to each type;
- (e) A description of how the reclamation will be achieved, including a timetable indicating when the reclamation plan will be implemented. The description of how the reclamation plan will be achieved shall include;
 - (1) The engineering techniques to be used in reclamation and a description of the major types of equipment to be used;
 - (2) An estimate of the cost per acre for the reclamation;
 - (3) A description of the manner and type of revegetation on affected lands which shall be sufficient to establish a diverse, long-lasting vegetative cover that is capable of self-regeneration and at least equal in cover to the original on the affected lands;
 - (4) Proposed practices to protect adjacent lands, Reservation resources, and the Reservation population from harmful effects emanating from the effected lands;
 - (5) Specifications for surface gradient restoration to a surface suitable to the proposed subsequent use after reclamation is completed;
 - (6) Plans to prevent disturbance of prevailing hydrologic balance of the affected lands and surrounding area and to prevent disturbance of the quality and quantity of surface and ground water;
 - (7) Methods for control and disposal of contamination from exploration or mining refuse;
 - (8) Where applicable, plans for diversion of surface water around the disturbed lands and for restoration of stream channels and stream banks to a condition minimizing erosion, siltation and other population;
 - (9) Where necessary to remove overburden to explore or mine minerals, plans for removal and segregation of topsoil from other soil. If such topsoil is not to be replaced on a backfill area within a time short enough to prevent deterioration of the topsoil or vegetative cover, other means shall be employed so that the soil is protected from water and wind erosion, remains free of contamination by other acid or toxic materials, and in a useable condition for sustaining vegetation when restored during reclamation. If, in the judgement of the Department, such topsoil is of insufficient quantity or of poor quality for sustaining revegetation, or if other material can be shown to be more suitable for the revegetation requirements, the operator, with the prior approval of the Department, may remove, segregate and preserve in a like manner such other material which is best to support revegetation; and
 - (10) A topographic map of suitable scale portraying the final land use for each portion of the affected lands.

4-6-10 Protests and Petitions for a hearing

Any person has the right to submit written comments to the Department with regard to any application made to the Department for a water quality permit under this Chapter. In addition, any person may request in writing that the Department hold a public hearing with regard to such application. In order to be considered timely and thus be considered by the Department, all such written comments and requests for public hearing regarding the proposed issuance of any water quality permit under this Chapter shall be submitted to the Department not more than twenty (20) days after the date of the last notice published by the applicant pursuant to section 4-6-7(9). The applicant shall be notified within ten (10) days of any

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written comments or request for public hearing submitted in response to his application and be supplied with copies of all such documents.

4-6-11 Approval and Disapproval Policy, Procedures and Administrative Appeal

(a) Upon receipt of any application for a water quality permit and all fees due from the operator, the Department shall set a date for the consideration of such application not more than ninety (90) days after the date of filing. At that time the Department shall approve, conditionally approve or deny the

application or, for good cause shown, hold a hearing on the question of whether the permit should be granted.

(b) Prior to the holding of any such hearing, the Department shall provide notice to any person who previously submitted either written comments or who requested a hearing regarding the application of the time, date and place of the hearing. A final decision on the application shall be made within one hundred twenty (120) days of the receipt of the completed application. In the event of serious unforeseen circumstances or significant snow cover on the affected land that prevents a necessary on-site inspection, the Department may reasonably extend the date by which it will render its decision.

(c) If action upon the application is not completed within the one hundred twenty (120) day period specified in section 4-6-11(b) the applicant may apply to the Colville Environmental Quality Commission and request that the CEQC direct the Department to act on the application within a time period established by the Commission.

(d) The Department shall grant a permit to an operator if the application complies with the requirement of this Chapter and all applicable Tribal and federal laws. The Department shall not deny or conditionally approve a permit, except for one or more of the following reasons:

- (1) The application is incomplete or the performance bonds have not been provided;
- (2) The applicant has not paid the required fee;
- (3) Any part of the proposed exploration or mining operation or reclamation plan, or the proposed future use of the affected lands is contrary to Tribal or federal law;
- (4) The exploration or mining operation may cause damage to a Reservation resource or may adversely impact the health, safety or welfare of the Reservation population;
- (5) The exploration or mining operation may adversely affect the stability of any significant, valuable, and permanent man-made structure located outside the affected land, except where there is an agreement between the operator and the person having an interest in the structure that damage to the structure is to be compensated for by the operator; or
- (6) The operator is alleged to be in violation of the provisions of this Chapter with respect to any operation within the Colville Indian Reservation. Such an operator shall not be issued a new permit until such other operation is determined to be in compliance with this Chapter.

(e) If the Department denies or conditionally approves a permit submitted by the operator, the Department shall so notify the operator in writing and shall state the reasons for the action and shall list such additional requirements as may be necessary either for the approval of the permit application or conditional approval of the permit. Within thirty (30) days the operator shall either accept such additional requirements as part of the approved permit or file a notice of appeal to the Colville Environmental Quality Commission. If a notice of appeal is filed, the Department may in its discretion grant a provisional permit during the pendency of such appeal, subject to such conditions as the Department believes are reasonable and necessary to effectuate the purpose of this Chapter.

4-6-12 Permits Subject to Modification

An approved water quality permit may, after timely notice and opportunity for a hearing, be modified by the Department at any time during the term of such permit for one or more of the following reasons:

- (a) To modify the requirements of the permit so that they do not conflict with existing law;
- (b) The Department determines that the previously approved permit is inconsistent with the intent and purpose of this Chapter;
- (c) The Department determines that the previously approved permit is impossible or impracticable to implement;
- (d) The operator and the Department mutually agree to modify the terms of the permit.

4-6-13 Duties of the Operator

(a) Every operator to whom an approved permit is issued pursuant to this Chapter may engage in exploration or mining upon the affected lands in conformity with the terms of that permit and this Chapter.

(b) All reclamation provided for in this Chapter shall, to the extent practicable, be conducted simultaneously with exploration or mining operations and in any case shall be initiated at the earliest possible time after completion or abandonment of exploration or mining activities on any segment of the permit area. Reclamation activities shall be completed not more than two (2) years after completion or abandonment of exploration or mining on each segment of the area for which the permit is requested, unless such period is extended by the Department.

(c) Within forty-five (45) days after completion or abandonment of exploration or mining on an area under permit or within thirty (30) days after each annual anniversary date of the operating permit, whichever is earlier, or at such later date as may be approved by the Department, and each year thereafter until reclamation is completed and approved, the operator shall file a report of activities completed during the preceding year on a form prescribed by the Department, which report shall:

- (1) Identify the operator and permit number;
- (2) Locate the operator by subdivision, section, township, and range, and with relation to the nearest town or other well known geographic feature;
- (3) Estimate acreage to be newly disturbed by exploration or mining in the next twelve-month period;
- (4) Update any maps previously submitted or provide such maps as may be specifically requested by the Department. Such maps shall show:
 - (A) The operating permit area;
 - (B) The unit of affected la©;
 - (C) The area to be explored of mined during the next twelve-month period;
 - (D) If completed, the date of completion of exploration or mining;
 - (E) If not completed, the area that will not be further disturbed by the exploration or mining operations; and
 - (F) The date of beginning, amount, and status of reclamation performed during the previous twelve (12) months. An operator operating under a combined water quality

permit may submit a single annual report, but such report shall include the data required in this section for each operating area.

4-6-14 [Reserved]

4-6-15 Transfer of Permit

No transfer, sale, or other assignment of the rights granted under any water quality permit issued pursuant to this Chapter shall be made without the written approval of the Department.

4-6-16 Performance Bonds and Others Security

(a) Upon receipt of any operating permit an operator shall not commence exploration or mining operations until the operator has deposited with the Department an acceptable performance bond on forms prescribed and furnished by the Department. This performance bond shall be a corporate surety bond executed in favor of the Department by a corporation approved by the Department.

(b) The bond shall be filed and maintained in an amount equal to the estimated cost of completing the reclamation plan for the area to be mined during the next twelve (12) month period and any previously mined area for which a permit has been issued and on which the reclamation has not been satisfactorily completed and approved. If an operator increases the area to be explored or mined during the twelve (12) month period, the Department may increase the amount of the bond to compensate for the increase.

(c) The Department shall have the authority to determine the amount of the bond that shall be required, and may refuse any bond not deemed adequate. The bond shall be conditioned upon the operator's faithful performance of the requirements set forth in this Chapter. In lieu of the surety bond required by this section may file with the Department a cash deposit, negotiable securities acceptable to the Department or an assignment of a saving account or of a savings certificate on an assignment form prescribed by the Department.

(d) Liability under the bond shall be maintained as long as reclamation is not completed in compliance with the approved reclamation plan unless released prior thereto. Liability under the bond may be released only upon written notification from the Department. Notification shall be given upon completion of compliance or acceptance by the Department of a substitute bond. In no event shall the liability of the surety exceed the amount of the surety bond required by this section.

(e) A public or governmental agency may not be required to post a bond under the terms of this Chapter, in the discretion of the Department.

(f) A blanket performance bond covering two or more exploration or mining operations may be submitted by an operator in lieu of separate bonds for each separate operation.

(g) In the event of any performance bond submitted by the operator to the Bureau of Indian Affairs is deemed adequate for the purpose of this Chapter, compliance with the performance bond requirements of this Chapter may be reduced or waived by the Department.

4-6-17 Enforcement Policy

(a) It is the policy of this Chapter to encourage informal, practical, result-oriented resolution of alleged violations and actions needed to prevent present or future damage to Reservation resources or adverse impact on the health, safety or welfare of the Reservation population. It is also the policy of this Chapter, consistent with the principle of due process, to provide effective procedures for enforcement.

(b) The following sections of this Chapter provide the following enforcement procedure: Informal conferences; administrative remedies; injunctions; judicial review and other civil relief. The enforcement procedure used in any particular case shall be appropriate in view of the nature and extent of the violation or the actual or potential damage or risk to Reservation resources or adverse impact on the health, safety or welfare of the Reservation population and in further consideration of the degree of bad

faith or good faith of the persons involved.

4-6-18 Informal Conferences

(a) Opportunity mandatory: The Department shall afford the operator or his representative reasonable opportunities to discuss proposed enforcement actions at an informal conference prior to taking further enforcement action; Provided, that the Department need not hold such an informal conference where the Department determines that the likelihood of further damage to Reservation resources or further adverse impact on the health, safety, or welfare of the Reservation population does not allow ample time for such an informal conference or conferences. Informal conferences may be used at any stage in enforcement proceedings, except that the Department may refuse to conduct informal conferences with respect to any matter then pending before the Colville Environmental Quality Commission or the Colville Tribal Court.

(b) Reports required: Department personnel in attendance at informal conferences shall keep written notes of the date and place of the conference, the persons in attendance, the subject matter discussed, and any decisions reached with respect to further enforcement action.

(c) Records available: Copies of written notes shall be sent to each participant in the conference, be kept in the Department files until one (1) year after final action on the permit involved, and be open to the public inspection.

4-6-19 Notice to Comply—Contents—Procedures—Hearing-Final Order Limitations on Action

(a) If a violation which has or may cause material damage to a Reservation resource or harm to the Reservation population has occurred or may occur then the Department in its discretion may issue and serve upon the operator a notice, which shall clearly set forth:

(1) The specific nature, extent, and time of failure to comply with the approved permit.

(2) The relevant provisions of this Chapter relating thereto;

(3) The right of the operator to a hearing before the Department; and

(4) The specific course of action ordered by the Department to be followed by the operator to correct such failure to comply and prevent, correct and/or compensate for material damage to Reservation resources or harm to the Reservation population which resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a Reservation resource; and/or those courses of action necessary to prevent continuing damage to a Reservation resource or harm to the health, safety or welfare of the Reservation population resulting from any violation, unauthorized deviation, or negligence.

(b) The Department shall mail a copy thereof to the operator at the address shown on the permits, showing the date of service upon the operator. The operator shall undertake the course of action so ordered by the Department unless, within fifteen (15) days after the date of service of such Notice to Comply, the operator shall request the Department in writing to schedule a hearing. If so requested by the operator, the Department shall schedule a hearing on a date not more than twenty (20) days after receiving such request. Within ten (10) days after such hearing, the Department shall issue an interim order either withdrawing its Notice to Comply or clearly setting forth the specific course of action to be followed by such operator. Such interim order shall become final ten (10) days after its issuance and the operator shall undertake the course of action so ordered by the Department unless within this ten (10) day period the operator appeals to the Environmental Quality Commission. The decision or order of the Colville Environmental Quality Commission shall be final agency action from which there is a right of judicial review.

4-6-20 Stop Work Order—Grounds—Contents—Procedure—Appeals

(a) The Department shall have authority to serve upon an operator a Stop Work Order if immediate action is necessary to prevent continuation of or to avoid material damage to a Reservation resource or harm to the health, safety and welfare of the Reservation population and:

- (1) There is any violation of this Chapter;
 - (2) There is a deviation from the approved permit; or
 - (3) Circumstances exist which would be a basis for modifying the permit pursuant to section 4-6-12.
- (b) The Stop Work Order shall set forth:
- (1) The specific nature, extent, and time of the violation, deviation, damage, or potential damage;
 - (2) An order to stop all work connected with the violation, deviation, damage or potential damage;
 - (3) The specific course of action needed to correct such violation or deviation or to prevent damage and to correct and/or compensate for damage to Reservation resources which has resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a Reservation population; and
 - (4) The right of the operator to a hearing before the Colville Environmental Quality Commission. The Department shall immediately file a copy of such order with the Colville Environmental Quality Commission and mail a copy thereof to the operator at the addresses shown on the permit application. The operator has commence an appeal to the Colville Environmental Quality Commission within fifteen (15) days after service upon the operator. If such appeal is commenced, a hearing shall be held not more than twenty (20) days after copies of the notice of appeal were filed with the Colville Environmental Quality Commission. The operator shall comply with the decision or order of the Department immediately upon being served, but the Colville Environmental Quality Commission, if so requested, shall have authority to continue or discontinue in whole or in part of the order of the Department under such conditions as it may impose the outcome of the proceedings.

4-6-21 Failure to Take Required Course of Action—Notice of Cost—Department Authorization to Complete Course of Action—Liability of Owner for Costs

If an operator fails to undertake and complete any course of action as required by a final order of the Department or a final decision of the Colville Environmental Quality Commission, the Department may determine the cost thereof and give written notice of such cost to the operator. If such operator fails within thirty (30) days after such notice is given to undertake such course of action, or having undertaken such course of action fails to complete it within a reasonable time, the Department may expend any funds available to undertake and complete such course of action and such operator shall be liable for the actual, direct cost thereof, but in no case more than the amount set forth in the notice from the Department, plus attorneys fees, expert witness or consultant fees, laboratory and technical costs, investigatory and other actual cost incurred by the Department.

4-6-22 Failure to Obey Stop Work Order—Department Action—Authorization

When the operator has failed to Obey a Stop Work Order, the Department may take immediate action to prevent continuation of or avoid material damage to Reservation resources or adverse impact on the health, safety, and welfare of the Reservation population. If a final order or decision fixes liability of the operator, such costs may be collected by the Department in any manner provided for by Tribal law.

4-6-23 [Reserved]

(Amended 9/2/10, Certified 9/9/10, Resolution 2010-620)

4-6-24 Inspection—Right of Entry

(a) The Department shall make inspection on affected lands, before, during and after conducting the exploration, mining and reclamation operations as necessary for the purpose of insuring compliance with this Chapter and to insure that no material damage occurs to Reservation resources or harm to the health, safety, or welfare of the Reservation population as a result of such operation.

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(b) Any duly authorization representative of the Department, including any consultant or contractor retained by the Department, shall have the right to enter upon affected lands at reasonable times to enforce the provisions of this Chapter. Further, where the Department so requests the Reservation Attorney shall promptly apply to the Colville Tribal Court for a civil administrative search warrant which shall have the authority to issue a search warrant upon reasonable cause.

4-6-25 Civil Remedial Action—Monetary Compensation Notice—Right to Appeal

(a) Every person who fails to comply with the provisions of this Chapter, as now of hereafter amended, shall be required to pay civil monetary damages in the full amount of the costs of detecting and mitigating, restoring or repairing any potential or actual damages directly or indirectly resulting from such violations, plus the administrative costs of enforcement including but not limited to investigatory costs, expert witnesses, laboratory and technical analysis, pre and post violation monitoring, collection of such damages, and attorneys' fee.

(b) In the event a specific monetary value cannot be placed on such direct or indirect potential or actual damage, such violating person shall be required to pay civil monetary damages in the minimum liquidated amount of one thousand dollars (\$1,000) per day for each day that such violation takes place. Each day of operation shall constitute a separate violation.

(c) The remedial action provided for by this section shall be initiated by the Department by notice in writing to the alleged violator either by certified mail with return receipt requested or by personal service and such notice shall describe the alleged violation with reasonable particularity. The person alleged to be in violation of this Chapter, who receives such notice for civil damage pursuant to this section, may within thirty (30) days of receipt of such notice apply in writing to the Department for the remission or mitigation of such remedial action. Upon receipt of such application, the Department may remit or mitigate the remedial action upon whatever terms the Department in its discretion deems proper; Provided, that the Department must specifically find and set forth in writing that such remission or mitigation is in the best interests of the Tribes and is consistent with the purpose of this Chapter. Any civil monetary damages imposed hereunder shall become due and payable thirty (30) days after receipt of such notice or thirty (30) days after the conclusion of any administrative or judicial appeal.

(d) Any person subject to any civil remedial action pursuant to section 4-6-25 may appeal to the Colville Environmental Quality Commission. Such appeals shall be filed within thirty (30) days of receipt of notice imposing any civil monetary damages unless an application for remission or mitigation has been timely filed with the Department. Where such an application for remission or mitigation has been made in a timely manner, any appeal to the Colville Environmental Quality Commission from such initial administrative review shall be filed within thirty (30) days of receipt of the Department's disposition of the application. The decision of the Colville Environmental Quality Commission shall be final agency action for purposes of judicial review.

(e) If the full dollar amount of any civil damages or other compensation due under this section is not paid to the Department within thirty (30) days after it becomes due and payable, the Department shall request that the Reservation Attorney bring action in the Colville Tribal Court to recover such compensation.

4-6-26 Enforcement

The Department or the Reservation Attorney acting on behalf of the Tribes, may take any necessary action through the Colville Tribal Court to enforce any final order or final decision or to enjoin any person after such person has failed to comply with any final order or final decision.

4-6-27 Administrative and Judicial Review

(a) Any person aggrieved by any order, decision, permit, or other action of the Department may obtain administrative appellate review thereof by the submission of a timely petition to the Colville Environmental Quality Commission pursuant to the standards and procedures of the Colville Administrative Procedure Act. Such petition for administrative appellate review shall be filed with the Chairman of the Colville

Environmental Quality Commission within thirty (30) days of the date of the order, decision, permit, or other action which is the subject of such appeal, unless a shorter time for such appeal is set forth in any other section of this Chapter, in which case the shorter time shall apply. Exhaustion of such administrative appellate review is a jurisdictional requirement to judicial review.

(b) Any person directly affected by any final order, final decision or other final action of the Colville Environmental Quality Commission may obtain judicial review of such order, decision or action by filing a timely petition with the Colville Tribal Court pursuant to the Colville Administrative Procedure Act. Such petition for judicial review shall be filed with the Court, as a civil matter under the Colville Tribal Code, within twenty (20) days of the decision of the Colville Environmental Quality Commission. Unless declared invalid upon judicial review, a final order, final decision, or other final action of the Colville Environmental Quality Commission shall be binding upon all parties.

4-6-28 Cooperation with Public Agencies—Grants and Gifts

Subject to approval of the Colville Tribal Council the Department is authorized to accept, receive, disburse and administer grants or other funds or gifts from any source, for the purposes of carrying out the provisions of this Chapter and to consult and cooperate with, federal, tribal, state and local agencies in matters pertaining to this Chapter. Subject to approval by the Tribal Council, the Department is further authorized to negotiate intergovernmental agreements which may create, modify, or change duties established by this Chapter; Provided that no regulatory changes shall be valid unless made in accordance with the Colville Administrative Procedure Act.

4-6-29 Statutes and Trust Responsibility Not Modified

Nothing in this Chapter as now or hereafter amended shall modify or waive any requirement to comply with applicable federal laws and regulations. Nothing in this Chapter as now or hereafter amended shall be construed to modify, waive or impair the trust responsibility of the United States.

4-6-30 Waiver of Regulation

Whenever a strict interpretation of this Chapter or the regulatory program established pursuant to this Chapter, would result in extreme hardship, the Department may waive or modify such regulatory requirements or portion thereof; Provided that such waiver or modification shall be consistent with the intent of this Chapter and; Provided further, that no such waiver shall be granted where material damage to Reservation resources or adverse impact upon the health and welfare of the Reservation population shall result therefrom.

4-6-31 Severability

If any provisions of this Chapter or the application to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Chapter which can be given effect without the invalid provisions or applications, and to this end, the provisions of this Chapter are declared to be severable.

BEST MANAGEMENT PRACTICE

4-6-60 Intent and Goal of BMPs

The Best Management Practices (BMPs) listed in the following section are intended to provide practical guidelines for mineral development activities consistent with goals of protecting the quality of the Reservation environment, in particular the surface and, groundwater resources of the Reservation from nonpoint sources of water pollution. Differing conditions calling for particular solutions may not permit strict compliance with these BMPs, but these BMPs shall be the bases, together with other requirements of this Chapter, for approving, conditionally approving or denying permits required by this Chapter. Departure from those BMPs constitutes a violation of this Chapter unless authorized by an approved permit or otherwise approved in writing by the Department.

4-6-61 Road Location, Design, Construction and Maintenance

(a) Roads can be a major contributors to sediment production resulting in water quality degradation in

connection with mining activities. A well designed, soundly constructed and properly maintained road system can significantly reduce water pollution problems. A reasonable amount of latitude in the design, construction and maintenance is allowable consistent with the purposes of this Chapter. Consultation and field reconnaissance of road location by an interdisciplinary team of tribal professionals may be required as a condition to issuance of a permit.

(b) The following standards shall apply to road location:

- (1) Minimize road density by using existing and abandoned roads whenever possible and practical. Keep new road construction at an absolute minimum.
- (2) Locate roads to minimize disturbance to all surface and groundwater resources on the Reservation. Avoid locating roads in narrow canyons, marshes, wet meadows, natural drainage channels, and geological hazard area.
- (3) Locate roads a safe distance from streams or lakes when running parallel to water bodies. At a minimum, do not locate roads within Streamside Management Zones.
- (4) Fit the road to the topography to minimize soil disturbance. Locate roads to take advantage of naturally stable areas, such as natural benches, ridgetops, flatter slopes, etc.
- (5) Keep road grades within eight-ten (8-10%) percent, or less, where possible and practical. Where excessive excavation requirements or topography constraints are present, occasional grades of up to fifteen (15%) percent may be used with prior Department approval. Keep steep segments as short as possible where the grade necessarily exceeds eight-ten (8-10%) percent.
- (6) Avoid long, continuous grades; avoid long, completely flat segments where ponding will occur.
- (7) Avoid headwalls at a tributary drainage source on ridgetop routes. Locate roads slightly off-center on ridgetop routes.
- (8) Avoid locating roads on excessively steep unstable, erosional, or slide prone slopes. Obtain soils and area geophysical information and review sensitive lands maps where available and survey adjacent similar areas for vegetation and topography "indicators" for suspected problem areas.
- (9) Minimize the number of stream crossings. All stream crossings must be approved by the Department in writing in advance.
- (10) Choose crossing locations at right angles to the stream channels.

(c) The following standards apply to road design:

- (1) Build the minimum adequate road for the exploration or mining system used. Design roads which can carry the anticipated traffic load with reasonable safety, accomplishes the mining requirements economically, and minimizes impacts to the other resources available in the area.
- (2) Fit the road to the topography so that alterations of natural features are minimized.
 - (A) Minimize and balance cuts and fills. Use waste excavation in fills to avoid heavy sidecasts whenever feasible.
 - (B) Sacrifice alignment to avoid heavy excavation. Fit the road to the topography so landscape alterations are minimized.

(C) Plan and locate switchbacks on the flattest slope available to avoid heavy excavation.

(D) Avoid sidestepping material on slopes over fifty (50%) percent which are terminated within five hundred (500) feet of a stream or lake.

(E) Fill slope ratios unless otherwise approved by the Department are;

Rock	--	1-1/2:1
Sandy Soil	--	2:1
Common earth	--	1-1/2:1

(F) Cut slope ratios unless otherwise approved by the Department are;

Common earth (on slopes over 70%)	-	3/4:1
Common earth (on slopes to 50%)	-	1/2:1
Hardpan, broken or soft rock	-	1/3:1
Rock	-	1/4:1

(3) Design roads to minimize interference with surface and subsurface drainage patterns.

(4) Plan stream crossings with care so that channel and bank disturbance is minimized.

(5) Where necessary to protect fill embankments from stream erosion, a headwall (usually riprap or gabions) is recommended to prevent erosion of the fill.

(6) All roads should be designed with adequate permanent or temporary water management and/or crossing structures so that the road does not become a source of erosion and sedimentation.

(A) All roads should be outsloped or ditched on the uphill side and appropriate surface drainage should be prevented by the use of crowning, ditching, adequate culverts or cross drains, relief culverts, water bars, diversion ditches and bridges as the location, road standard or topography may require.

(B) Cross drains, relief culverts and diversion ditches shall not discharge directly into natural waters or onto erodable soils or fill slopes unless adequate outfall protection is provided which prevents erosion.

(C) Effective drainage structure shall be installed at all low points in the road gradient. Generally, spacing should be no wider than as follows:

<u>Road Gradient</u>	<u>Maximum Drainage Spacing</u>
0 to 8%	1200 feet
8% to 15%	900 feet
15% or over	600 feet

This guide provides only a rule of thumb approximation. Parent material, slope position and drainage area or pattern may dictate wider or closer spacing.

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(D) Drainage structures on permanent roads shall be designed to handle a fifty (50) year flood and should be functional at all times. Plugged or damaged structures shall be cleaned or replaced before runoff occurs.

(E) Drainage structures on temporary roads which cross natural watercourses shall be designed to handle a twenty-five (25) year flood and shall be removed upon completion of use, restoring the watercourse to its original water carrying capacity.

(F) Relief culverts shall meet the following minimum specifications:

(i) Be at least eighteen (18) inches in diameter or the equivalent;

(ii) Be installed with adequate headwalls, where needed, and sloping downward toward the outside shoulder of the road at a minimum to keep the culvert clean and at a maximum of four (4%) percent.

(G) Drainage structure of relief culverts shall be installed concurrently as road work progresses.

(H) Design road grades and locate culverts so silt will settle out and not drain into the watercourses.

(d) The following standards apply to road construction:

(1) Merchantable timber removed for right-of-way construction shall be removed or decked at suitable locations where the timber will not be covered by fills or side casts. Fall all trees that lie within the required right-of-way boundary, prior to subgrade construction. Fall all danger tree snags and leaners as directed by the Department which could unpredictably fall and hit the road.

(2) Deposit excess debris, slash and road building materials in stable locations outside of the Streamside Management Zone.

(3) Do not allow the low point of a grade break to occur on deep fills if possible.

(4) All ditches, culverts, cross drains, water bars and diversion ditches shall be installed concurrently with construction of the roadway.

(5) Alter the spacing of surface drainage structure, if necessary, so that water spills on stable areas.

(6) Avoid unnecessary soil and vegetation disturbance.

(7) Do not divert the runoff or streamflow from two or more drainage into one channel.

(8) Do not dredge materials from streams for road construction.

(9) Clear stream channel of all debris and slash generated during operations prior to removal of construction equipment from the vicinity or the winter season, whichever is first.

(10) End haul or overhaul construction is required where sidecast material would be within the Streamside Management Zone of Type 1 through Type 4 Waters.

(11) Material used in road construction shall be free of loose stumps, excessive accumulation of slash, and woody materials of more than three (3) cubic feet.

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(12) During road construction, fills or embankments shall be built up in two foot layers. Each layer shall be compacted by operating the tractor or other equipment over the entire surface of the layer. Chemical compacting agents may be used in accordance with sections 4-7-86 and 4-7-87.

(13) Construction should be accomplished when low flow periods and soil conditions are least likely to result in excessive erosion and/or soil movement.

(14) Spoil and debris shall be deposited outside the Streamside Management Zone. When soil and other debris is deposited in an appropriate location, embankments so formed shall be compacted by layering or so stabilized that the risk of its later entering the Streamside Management Zone is minimal.

(15) When soil exposed by road construction appears to be unstable or erodible and is so located that slides, slips, slumps or washing may reasonably be expected to cause unreasonable damage to a reservation resource, then such exposed soil areas shall be seeded with grass, other cover or be treated by other means acceptable to the Department.

(16) When temporary stream crossings are necessary, pick locations requiring a minimum of bank disturbance and soil displacement. Equipment shall not be used in stream crossing without prior written approval of the Department.

(17) Fully backslope each graded section except where vertical banks are proven to be more stable than sloping ones.

(18) Rough grade a new road only as far as that road can be completely finished during the current construction season. Drain incompleated segments of permanent or temporary roads to be left over winter season or other extended periods, outsloping or ditching with cross drains, water bars, and diversion ditches to minimize soil erosion and stream siltation.

(19) Do not conduct earth moving activities when the soils are saturated. Contract grades through wet soils during dry season.

(20) Use grade changes (concave vertical curve) to turn water off roads, particularly to protect fills at stream crossings.

(21) Shut down construction during periods of heavy rainfall.

(e) The following standards apply to bridges:

(1) A bridge is required for crossing any stream or lake which is regularly used for recreational boating as designated by the Department.

(2) Permanent bridges shall be designed and constructed at the minimum to pass without obstruction the fifty (50) year flood level of the stream it spans. Bridges should be designed by a registered engineer unless the Department authorizes specific exemptions for particular bridge crossings.

(3) One end of each new permanent log or wood stringer bridge should be tied or firmly anchored, if the elevation of the bridge is within ten (10) vertical feet of the fifty (50) year flood level.

(4) Plan all construction activities in the stream to coincide with low seasonal streamflows.

(5) Excavation for placement of bridge sills, piers, abutments or wing walls shall be done from outside the ordinary high water mark, unless such operations are authorized by the Department.

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(6) Construction equipment shall be operated in a manner that will cause the least aggravation to the streambed and banks. Remove any stumps, logs, chunks, branches, etc., that might have been pushed into the streambed during construction.

(7) Bridge approaches shall slope away from the bridge deck to avoid drainage onto the deck and into the water body. This will also extend the life of the bridge.

(8) Bridge approach fills and banks shall be stabilized as necessary to prevent undue or excessive erosion, paying particular attention to proper ditching. Riprap, bulkheads, wing wells or other measures may be required.

(9) Stream bed and bank areas shall be restored as nearly as possible to their original condition upon completion of the project.

(10) When earthen materials are used for bridge surfacing, curbs or guards of adequate size shall be installed which will prevent the surface material from entering the stream.

(11) Temporary bridges shall be installed during low water periods, used or removed before the following peak water flow (spring runoff).

(f) The following standards apply to culverts:

(1) All permanent culverts shall be capable of handling the fifty (50) year flood.

(2) Minimum sizes of permanent culverts are;

(A) Thirty-six (36) inches in diameter for migratory fish streams. Migratory fish stream are those containing a species of fish which must move to another body of water to complete its life cycle. Open bottom culverts may be required.

(B) Twenty-four (24) inches in diameter for resident game fish streams. Open bottomed culverts must be required.

(C) Eighteen (18) inches in diameter for other water.

(3) Culverts constructed for permanent stream crossings should be of galvanized steel, concrete, aluminum or plastic and of sufficient gauge or thickness. Two feet or half the diameter of the culvert, whichever is greater, shall be the minimum overburden.

(4) The alignment and slope of the culvert shall conform to the natural flow of the stream for all streams.

(5) In areas where fish are present, the bottom of the culvert shall be installed slightly below the natural stream bottom at both ends of the culvert.

(6) All culvert installations shall terminate on materials that will not readily erode under full flow of the culvert.

(A) If water is diverted from its natural channel, return the water to its natural channel via culvert, flume spillway or other non-erodible structure.

(B) When flumes, downspouts, downfall culverts, etc., are used to protect erodible soils or return water to its natural stream course, the discharge point must be protected from erosion by: reducing water velocity by catch basins, use of rock spillways or gabions,

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riprapping, or installing permanent splash plates.

(7) Culvert approaches shall be hand-cleared of natural and logging debris for a distance of one hundred (100) feet upstream from the culvert inlet of all material that may reasonably be expected to plug the culvert.

(8) The inlet ends of all ditch culverts shall have adequate catch basins and headwalls to minimize the risks of culvert siltation and “by-pass” of the culvert from erosion of the headwall. Rock headwalls shall be placed on all culverts where annual peak flows exceed 100 cfs; and where headwall erosion is expected on smaller streams, as determined by the Department.

(9) Ditch culverts that may reasonably be expected to carry near capacity water volumes or to encounter some siltation should:

(A) Be skewed at least twenty-five (25) degrees from perpendicular to the roadbed in the direction of the water flow.

(B) Have a smooth gradient drip of not less than two (2) percent.

(10) Fill around culverts, shall be compacted during placement to avoid failure by undercutting and stream bed excavation should be avoided.

(11) All required culverts, ditches, cross drains, drainage dips, water bars and diversion ditches shall be installed concurrently with construction of the roadway.

(g) The following standards apply to temporary water crossing:

(1) “Fording” or limited crossings that utilize the natural stream bed as a road may be conditionally permitted through approval of specific crossings site location(s), frequency and dates of occurrence.

(2) Temporary bridges or culverts, adequate to carry the twenty-five (25) year flow for the operation period can be used when:

(A) A permanent road is not justifiable, and

(B) The temporary structure is installed after spring runoff and removed prior to the possibility of commencement of the following spring runoff.

(3) Install culverts in a manner which will cause the least amount of siltation. Limit tractor or machine activity in bed of stream to the absolute minimum necessary to coincide with low flow periods (late summer and early fall).

(4) Temporary bridges or culverts shall be promptly removed upon completion of use. The removal shall include:

(A) Restoration of the stream channel to its original water carrying capacity.

(B) Efforts to avoid siltation to the stream bed.

(C) Remove or protect approaches to the crossing by riprapping, revegetating, or whatever means necessary to insure the stabilization of the approach below the fifty (50) year flood level.

(h) The following standards apply to road maintenance:

(September 2010 version of Chapter 4-6)

(1) Maintain roads immediately after logging and whenever necessary by cleaning ditch lines, blading debris from empty landings, trimming damaged culverts ends and chunking out culvert openings.

(2) Place all material obtained during maintenance of ditches, etc., in a safe bench or cove location. Never deposit such materials directly into a streambed or in areas where the material can be washed into a stream during high flow periods.

(3) Retain outslope drainage and remove all berms on the outside edge, except those intentionally constructed for the protection of road grade fills.

(4) Road surfaces shall be maintained to reduce erosion and water quality degradation potential by using water, surface binders, sealers or oilmats. All road surface treatments, except water, shall not be sprayed within the Streamside Management Zone for those existing road segments that are within the established zones. Extreme care should be exercised to avoid excess application of any treatment.

(i) The following standards apply to active roads:

(1) To the extent necessary to protect Reservation resources, the following maintenance shall be conducted on such roads:

(A) Culverts, ditches, water bars and all other drainage structures must be kept open and functional and shall be inspected annually.

(B) The road surface shall be maintained as necessary to minimize erosion of the surface and subgrade:

(i) Roads shall be watered or treated with chemicals to prevent “powdering” of the road surface;

(ii) During and upon completion of the operation, road surfaces shall be crowned, outsloped or water barred and unnecessary berms removed to prevent erosion of the roadbed.

(C) All ditches and drainage structures shall be cleaned of slash, debris, and siltation upon completion of operations. Structures damaged or made less effective as a result of the operation shall be replaced or restored.

(j) The following standards apply to abandoned roads:

(1) No subsequent maintenance of an abandoned road is required after the following procedures are completed:

(A) Road surfaces shall be outsloped, water barred, revegetated or otherwise left in a stable condition suitable to prevent erosion.

(B) Ditches shall be adequate to carry water loads and cleaned on completion of use.

(C) Temporary culverts, bridges or other water crossing structures shall be removed.

(D) The road shall be blocked to vehicular traffic and should be posted “Closed to Vehicular Traffic”.

(k) The following standards shall apply to road ballast and waste disposal areas:

(September 2010 version of Chapter 4-6)

(1) Road ballast or gravel pits shall be located a safe distance from streamways. At a minimum, do not locate road ballast or gravel pits in the Streamside Management Zone. Pit runoff shall be directed away from the water course. Rock removal from stream beds overflow channels is not permitted.

(2) During construction and operation of rock quarries, gravel pits or borrow pits, runoff water shall either be diverted to the forest floor or passed through one or more settling basins, as approved by the Department.

(3) During operation, surface flows shall be prevented from passing through or out of borrow pit areas.

(4) If rock is to be washed, provision must be made for adequate settling basin(s) to prevent any stream siltation.

(5) Spoil disposal shall be located:

(A) Outside the Streamside Management Zone;

(B) Where the final slopes after completion of the project will be no greater than the fill slope ratios set forth in section 4-6-61(c)(2)(E) for materials where dumped;

(C) On areas having the lowest potential timber productivity, where practical;

(D) On slopes where the erosion or mass soil movement is minimal;

(E) All spoil will be placed to allow drainage without water ponding.

(6) All rock quarries, gravel pits, spoil areas and borrow areas in use when those regulations are adopted shall be reclaimed within two (2) years from the time the rock or gravel source is exhausted or abandoned. Reclamation procedures include:

(A) Remove all deleterious material that has potential for damaging Reservation resources or that would prevent revegetation of an otherwise plantable area.

(B) Grade all cut and fill slopes to the fill slope ratios set forth in section 4-6-61(c)(2)(E) for material present, unless otherwise approved.

(C) Revegetation to the extent practical.

(l) The following standards apply to roadside brush control:

(1) Use mechanical control methods in preference to chemical means where practical.

(2) Chemical control of roadside brush will not be done within Streamside Management Zones.

(m) The following standards apply to road surface treatment:

(1) Apply oil that is not potentially contaminated by any substance that is hazardous to any Reservation resource or to the health, safety or welfare of the Reservation population to the road surface only when the air temperature is above 55° F, when the ground is frost-free, and during the season when there is a minimal chance of rain for the next forty-eight (48) hours.

(2) Water the road surface prior to application of oil to assist in penetration.

(September 2010 version of Chapter 4-6)

(3) Construct a temporary berm alongside the road shoulder where needed to control runoff of the applied chemical.

(4) Take extreme care to avoid excess application of road chemicals. Shut of the flow at the Streamside Management Zone.

(5) When cleaning out storage tanks or the application equipment tanks used for storage and application of road treatment materials, dispose of the rinse water, other fluids and solids on the road surface or in a place safe from potential contamination of water.

4-6-62 Operations Drainage

(a) All surface waters which might damage regraded slopes or drain into the exploration of mine operations will be intercepted on the uphill side of the highwall or other operations perimeters by diversion ditches and be conveyed by stable channels or other means to natural or prepared watercourses outside the operations area, unless the Operator determines, with the written concurrence of the Department, that such ditches and channels are unnecessary or would create a serious pollution problem. Such diversion ditches and channels shall be of sufficient size and grade to carry the twenty-five (25) year flow event. If diversion attaches are likely to carry surface water only intermittently, they should be re-topsoiled and revegetated with grasses, forbs and/or legumes. All diversion ditches and channels should be mapped or shown on the aerial photograph submitted with the Permit Application.

(b) No surface waters will be discharged through or permitted to infiltrate onto existing mine workings.

(c) Surface waters and groundwaters will be controlled to prevent their entry into mine working.

(d) All drainage from active exploration or mining operations shall be treated in impoundment or treatment facilities before discharge into a water course. Under no circumstances should water be discharged into highly erodible soil or spoil banks.

(e) Spoil shall not be placed in drainage ways. The lower edge of spoil piles will be placed well outside the Streamside Management Zone.

(f) When cleaning underground sumps or tanks, the sediment shall never be flushed to a water course or deposited where it will wash into a lake or stream.

4-6-63 Drilling of Exploration Operations

(a) The number and location of drill holes, test pits and other excavation shall be shown on the map or aerial photograph submitted with the Permit application.

(b) Drill sites, test pits, bulldozer work and other excavation shall not be conducted in dry or flowing stream channels. Excavations and bulldozer work should be kept to a minimum and all reasonable efforts should be made to locate drill sites where no bulldozer work will be necessary.

(c) Drilling mud and drill cuttings should be confined to the site. Whenever possible these materials should be replaced in the drill hole as soon as geophysical loggings are completed. All other refuse from drilling operations shall be disposed of by burial or by hauling to an authorized landfill. Drill holes should be plugged with a full clay plug.

(d) Drill holes shall be abandoned in the following manner:

(1) Any artesian flow of groundwater to the surface be eliminated by a plug made of cement or similar material or by a procedure sufficient to prevent such artesian flow unless an agreement is reached with the Department for another use of such water.

(2) Drill holes which have encountered any aquifer shall be sealed, utilizing a sealing procedure that is adequate to prevent fluid communication between aquifers.

(3) Each drill hole shall be securely capped at a minimum depth compatible with local cultivation practices or at a minimum of two feet below either the original land surface or the collar of the hole, whichever is the lower elevation. The cap is to be made of concrete or other material that is satisfactory for such capping. The site shall be back-filled above the cap to the original land surface.

(4) Each drill site shall be reclaimed pursuant to this Chapter including, if necessary, reseeded if grass or any other crop is destroyed.

(e) Abandonment in a manner provided in paragraph (d) of the section shall occur immediately following the drilling of the hole and the probing for minerals in the exploration process. However, a drill hole may be maintained as temporarily abandoned without being plugged, sealed or capped. However, no drill hole which is to be temporarily abandoned without being plugged, sealed or capped shall be left in such a condition as to allow a fluid communication between aquifers. Such temporarily abandoned drill holes shall be securely covered in a manner which will prevent injury to persons or animals.

(f) No later than sixty (60) days after the completion of the abandonment pursuant to paragraph (d) of this section of any drill hole which has artesian flow at the surface, the person conducting the exploration or mining shall submit to the Department a report containing the location of such hole to within two hundred (200) feet of its actual location, the estimated rate of flow of such artesian flow (if such is known), and the facts of the technique used to plug such hole. Such report and all information contained therein shall be confidential in nature and shall not be a matter of public record.

(g) No later than twelve (12) months after the completion of the abandonment of any drill hole pursuant to paragraph (d) of this section, there shall be filed by the person conducting the prospecting with the Department a report containing the location of the hole to the nearest forty-acre legal subdivision, and the facts of the technique used to plug, seal or cap the hole. Such report and all information contained therein shall be confidential in nature and shall not be a matter of public record.

4-6-64 Storage of Fuels and Chemicals

(a) Large quantities of gasoline, diesel oil, petroleum products and toxic chemicals, either on the surface or underground, will be stored in durable tanks or containers and within an area surrounded by dikes to contain or prevent escape in case of a major spill or leak.

(b) All underground service areas for diesel powered equipment and underground fuel transfer areas must be equipped with sumps that will prevent petroleum waste and spills from gaining access to the mine drainage system.

4-6-65 Water Improvement and Treatment

(a) Water impoundment and treatment facilities, such as collection basins, water retarding structure or siltation dams, may be created, if authorized in the approved permit. Before such approval may be granted, it must be adequately demonstrated to the satisfaction of the Environmental Trust Department that:

(1) The size of the impoundment is adequate for its intended purpose;

(2) The floor of the water impoundment or treatment facilities must be adequate sealed prior to filling to prevent leakage;

(3) The impoundment dam construction will be so designed as to achieve necessary stability with an adequate margin of safety, including spillway or other devices to protect against washouts during the one hundred (100) year flood event;

(4) The quality of impounded water will be suitable on a permanent basis for its intended uses and that discharges from the impoundment will not degrade water quality below water quality standards established pursuant to applicable Tribal or federal law in the receiving stream;

(5) The level of the water will be reasonably stable;

(6) Final grading will provide safe access for proposed water users; and

(7) Such water impoundments will not result in diminution of the quality or quantity of water utilized by adjacent or surrounding landowners for agricultural, industrial, recreational, domestic or other uses.

(Amended 9/2/10, Certified 9/9/10, Resolution 2010-620)

(b) The Operator shall also agree, as a condition of the granting of the permit, to establish additional treatment facilities after commencement of the construction or operation of the water impoundment or treatment facilities if conditions arise that were not anticipated or if the treatment facilities are not adequate to maintain water quality or quantity conditions.

(c) The Operator shall also agree, that if feasible, the effluent from water impoundment and treatment facilities will be used as an industrial water supply for milling or other mine uses.

4-6-66 Tailings Ponds

The following standards shall apply to tailings ponds:

(1) Tailing ponds will be designed, constructed and operated so that there is little or no discharge. The floor of tailings ponds must be adequately sealed to prevent leakage prior to filling.

(2) Tailings ponds dikes or dams will be designed and constructed to prevent leakage, slumping or overtopping, including features such as cut-off walls and the compaction of materials similar to that required in water storage structures. All tailings ponds will be constructed with a spillway or other adequate overflow structure that will prevent overtopping or washouts during the one hundred (100) year flood event. If possible, tailings pond dikes or dams will be constructed of angular waste rock from mining operations rather than rounded or alluvial materials.

(3) If possible, tailing ponds shall be constructed off channel so that surface runoff will bypass the pond. A natural water course shall not be used to transport mine or mill wastes to a tailing pond. Surface drainage that would normally flow into a tailings pond must be diverted around the pond. Conduits carrying surface water shall not be located beneath the tailings pond. Natural precipitation runoff intercepted above the tailings pond must be re-routed around the pond and discharged further downstream into the natural channel.

(4) Boom or dikes shall be used in large tailings ponds to reduce wave action and erosion.

(5) Wood cribs shall not be used as integral parts of tailings ponds, dikes, or dams.

(6) Tailings ponds shall not be used as burial grounds for toxic chemicals.

(7) Tailings ponds shall be designed and constructed so as to provide for their revegetation upon filling or abandonment. To reduce erosion, filled tailings ponds shall be either revegetated or covered with a two (2) foot layer of waste mine rock.

(8) Erosion of tailing ponds located adjacent to stream shall be controlled by the construction of a coarse riprap facing or a dike to prevent stream encroachment.

(9) To reduce leachate problems, the surface of filled tailings ponds will be graded to prevent ponding or the decant system modified to remove precipitation.

(September 2010 version of Chapter 4-6)

4-6-67 Standard for pH, Alkalinity, Turbidity and Heavy Metals

(a) The Operator shall treat all waters discharged from the affected lands, where necessary, to prevent waters from leaving the affected lands with a pH of less than 6.0 or greater than 9.0, or with an iron concentration in excess of seven (7) milligrams per liter (m/l). Discharge from the affected lands must register positive alkalinity - total alkalinity must exceed total acidity.

(b) Turbidity of water leaving the affected land shall not exceed 100 Nephelometric Turbidity Units (NTU). The maximum allowable increase to naturally occurring stream turbidity from the affected lands in 10 NTU, except the four hour period following a major precipitation event when the discharge shall not contain suspended sediments in excess of 15 NTU above naturally occurring stream turbidity, and except during the twenty-four (24) hour period following a major precipitation event when waters discharged from the affected lands shall not contain suspended sediments in excess of 25 NTU above naturally occurring turbidity. All analyses for this section shall be performed according to standards set forth in Environmental Protection Agency document entitled, "Standard Methods for Examination of Water and Wastewater."

(c) In accordance with criteria for other materials exhibiting a residual life exceeding thirty (30) days in water, no heavy metals or heavy metal compounds shall be pumped or allowed to flow from affected lands before or after reclamation in concentrations exceeding one-hundredth (1/100th) of the four (4) day median tolerance limit (TIm96) for game fish in the receiving waters.

4-6-68 Stream Alteration

Reclamation plans must contain the following provisions where stream channels or banks are to be permanently relocated.

- (1) The relocated channel will be of a length equal to or greater than the original channel, unless a variance is granted by the Department.
- (2) The relocated channel will contain meanders, riffles and pools similar to those in the original channel.
- (3) Stream banks are to be rounded to prevent slumping and sloughing and are to be revegetated in keeping with acceptance agriculture or reforestation practices the first appropriate season following channel relocation.

4-6-69 Generation of Objectionable Effluents

Where exploration or mining has left an open pit and the composition of the floor and/or walls of the pit are likely to cause formation of acid, toxic, or other pollution solutions on exposure to moisture, the reclamation plan must provide for:

- (1) Insulation of all faces from moisture or water contact by covering to a depth of two (2) feet or more with material or fill not susceptible itself to generation of such objectionable effluents; or
- (2) Processing of any such objectionable effluents in the pit before their being allowed to flow or be pumped out, in order to reduce toxic or other objectionable concentrations to a level deemed safe to humans and Reservation resources; and
- (3) Drainage of any such objectionable effluents to settling or treatment basins when the objectionable effluents must be reduced to levels deemed safe by the Department before release from the settling basin; or
- (4) Absorption and/or evaporation of objectionable effluents in the open pit itself; and
- (5) Prevention of entrance into the open pit by persons or livestock lawfully upon adjacent lands by fencing, warning signs, and other devices.

(Chapter 4-6 Adopted 1/18/85, Resolution 1985-20)

(September 2010 version of Chapter 4-6)