40-8982

IN REPLY REFER TO:
DMC-EA-1

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
P.O. Box 389
SPOKANE. AGENCY
WELLPINIT. WA 99040

March 30, 1989

To Interested Parties

Enclosed for your review is Bureau of Indian Affairs Draft Environmental Assessment for a Road/Pipeline construction between the Midnite Mine the Sherwood Mine. This draft envrionmental assessment was prepared pursuant for compliance with NEPA and the CEQ regulations as set forth in 40 CFR parts 1500-1508, the policy of the Interior as set forth in 516 DM 1.1 - 7.7B, and as set forth in 30 BIAM Supplement 1, Release 2.

Please review this draft report and return written comments to Donna Bruce by Monday, April 17, 1989. Written comments will be included as part of the final environmental assessment.

If you have any questions regarding review of the draft document, please contact Donna Bruce at (509) 258-4561, FTS 439-7709.

Sincerely

Michael P. Whitelw
Superintendent

Enclosures

DFO2
1/1

89-0541

IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
P.O. Box 389
Spokane, Agency
Wellpinit, WA 99040

NOTICE OF AVAILABILITY

Notice of Availability of a Draft Environmental Assessment on the Contingency Plan for Construction of Haul Road and Pipeline.

AGENCY:

Bureau of Indian Affairs, Spokane Agency

ACTION:

Notice

SUMMARY:

This notice advises the public that copies of the Draft Environmental Assessment on the contingency plan for the widening of an existing road and construction on an above ground pipeline between the Midnite Mine and the Sherwood Mine is available for public review and comment.

DATES:

Written comments on the Draft Environmental Assessment are due April 17, 1988.

ADDRESS:

Comments should be addressed to :
Michael P. Whitelaw, Superintendent
Bureau of Indian Affairs - Spokane Agency
P.O. Box 389
Wellpinit, WA 99040

FOR FURTHER INFORMATION CONTACT:

Donna R. Bruce, Geologist
B.I.A.-Spokane Agency
Branch of Mining
P.O. Box 389
Wellpinit, WA 99040
(509) 258-4561 or FTS 8-439-7709

DRAFT

ENVIRONMENTAL ASSESSMENT
ROAD/PIPELINE CONSTRUCTION BETWEEN MIDNITE AND SHERWOOD MINE

BACKGROUND STATEMENT:

There is a proposal by BIA to construct a three-lane haul road and pipeline between the Midnite and Sherwood open-pit uranium mines on the Spokane Reservation, Washington. The mines are three-air miles apart. The purpose of the road and pipeline is preparation for the contingency that BIA will be forced to treat and discharge 350-million gallons of radionuclide bearing acid mine water impounded at the Midnite Mine, mitigate formation of the acid water and must use the Sherwood mill and tailings facility to do so.

This Environmental Assessment examines the impact of road construction and pipeline installation.

MIDNITE MINE

The Midnite Mine has operated since 1956 and has disturbed approximately 300 acres of moderate to steep terrain. Ore was hauled from the mine to Ford, Washington for processing. The ore reserves are approximately ninety percent depleted. The mine dumps (spoil piles) and ore piles generate acid mine water (approximately 60 million gallons annually) from reaction between reactive rock and rain or ground water. The water is currently being collected and impounded in pits at the mine. Otherwise, it flows into surface streams emptying into Lake Roosevelt.

Dawn Mining Company, lessee and operator, is currently in non-compliance with Federal Mining Regulations and lease terms, and has failed to adequately respond to Mine Orders from the Bureau of Indian Affairs and the Bureau of Land Management. They have failed to provide an approvable mine/reclamation plan or reclamation bonding for the site. The BIA is considering mine lease cancellation. In 1986, the company was issued an EPA permit for treating and discharging the impounded water. To date, they have not been successful. The BIA must prepare for the contingency that, as a result of lease cancellation, they will become responsible for conducting reclamation and for treating and discharge of the mine water.

SHERWOOD MINE

The Sherwood Mine has operated since 1976 and disturbed approximately 450 acres which includes the pit adjacent mill and tailings disposal ponds. Approximately eighty percent of the ore reserves remain unmined. Western Nuclear, Inc., owner/operator and lessee of the Sherwood mine/mill complex decided to dismantle the mill and reclaim the mine site because of uranium market conditions. This was funded and scheduled to begin in 1987. Before reclamation started, Western Nuclear offered to turn ownership of the entire complex (including reclamation funding) over to the Tribe in return for relief from reclamation

responsibilities. An economic feasibility study of Tribal operation of the complex indicated marginal profitability. The Tribe decided that based on economic considerations alone, including the cost of holding the mill on stand by, the risk was too great to accept Western Nuclear's offer.

The BIA made an administrative decision to pay for maintaining and holding the Sherwood mill and tailings disposal system on stand by for two years until it is known if Dawn Mining Co. can successfully treat and discharge the impounded water and if Dawn provides the required reclamation design. The BIA has determined that using the existing mill/tailings facility is the most certain, efficient and safe method of water treatment and disposal if it becomes necessary for BIA to treat the water.

The decision to pay holding cost and construct the road and pipeline was made at this particular time because Western Nuclear had scheduled dismantling the complex, after which it would not be available.

There is a question about the extent of NEPA consultation BIA will undertake before the final decision to either build, or not build the road and pipeline. This Environmental Assessment review will lead the BIA Superintendent to one of three actions:

1. Sign a Finding of No Significant Impact (FONSI), after which the construction could take place.

2. Determine that the impacts of construction are not well enough known, or that significant public concerns have not been answered, which could lead to the decision to prepare an Environmental Impact Statement.

3. Determine the controversy raised by the road/pipeline project has a greater impact than alternative methods of mine site management, and stop the project at that point.

The BIA and BLM estimate reclamation costs, including water treatment, at the Midnite Mine between $20 and $30 million. Reclamation design will be directed at mitigating the acid water. Specific required actions are:

1. Dispose of the impounded water and contained waste will require a chemical treatment plant and permanent solid waste disposal site.

2. Drain the internal mine workings.

3. Recountour the disturbed surface to drain meteoric water away from reactive rock.

4. Surface the recontour area with a soil medium which will permanently support vegetation for erosion control, prevent meteoric water percolation into the mine dumps and limit exposure of reactive rock to oxygen it is estimated 1.5 feet of clay and soil will be required.

5. Revegetate the reclaimed surface.

Several factors will be considered during the Superintendents decision and should be considered during consultation with the interested parties.

1. A decision has already been made by BIA that before any reclamation actions are approved a full Environmental Impact Statement on design and implementation of reclamation at the Midnite Mine will be prepared.

2. BIA fully intends that Dawn Mining Co. remain responsible for, and accomplish both water treatment and mine reclamation, and therefore, BIA does not intend to do either unless Dawn fails.

3. If Dawn Mining Co. treats the water and reclaims the mine, BIA will reclaim/dismantle any roads or pipelines constructed without using them (likewise, if BIA does use the road or pipe, they will be reclaimed after use).

4. Being considered here is construction of a road and pipeline. Obviously, use of the road and pipe may have significant impact on the environment and will be part of implementing a reclamation plan. Part of this consultation will be discussion and determination whether use of the road/pipe should be considered along with construction. If we do not consider use of the road and pipeline, the process of review will appear to be, or actually be, disjointed, fragmented and incomplete. If we consider use of the road and pipeline, we will be doing so without a reclamation plan/design upon which the use will be based. We will also lack geophysical, geochemical, hydrologic, botanical and soils data currently being collected by DOI. This baseline data is necessary for the full EIS which must be completed before reclamation begins.

5) It is probable that resurfacing the mine site will require importing as much as four-million tons of dirt and clay. This material is available near the Sherwood Mine. In addition, ore, low grade ore and other reactive rock ultimately will need to be moved from the mine site under a final reclamation design. It is cost effective for DOI to construct a haul road for these purposes at the same time the pipeline maintenance road is constructed.

SUMMARY
Environmental Assessment
Contingency Plan for Construction of Haul Road and Pipeline

Lead Agency: Bureau of Indian Affairs, U.S. Department of the Interior

Responsible Official and Contact Person:

Michael P. Whitelaw, Superintendent
Spokane Agency
Bureau of Indian Affairs
Wellpinit, Washington 99040
509/258-4561

Proposed Federal Action:

The Bureau of Indian Affairs proposes to approve and fund construction of a three lane "haul road" and laying of a 10-inch pipeline along a six-mile route between the Midnite and Sherwood open-pit uranium mines. The road construction will primarily be widening of an existing BIA system road. Reduction of grades and straightening of sharp corners will require construction of approximately 1.5 miles of new road near the present one. The pipe will be laid on the surface near the road. Two or three pump stations will be installed along the pipe route.

SUMMARY: Three Alternatives Considered

1. (Preferred Alternative) To widen an existing BIA road to accommodate 30 ton over-the-road dump trucks, and construction of a 10-inch above ground pipeline along the right-of-way in order to use the road to service the pipeline.

2. To construct a three-lane haul road and above ground pipeline along a new route between the mines using the shortest route through an undistrubed area following the topography.

3. No action alternative.

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PURPOSE AND NEED FOR ACTION:

The BIA must prepare for the contingency that Dawn Mining Company will not be able to treat and discharge the impounded mine water, and that BIA will become directly responsible for doing so. Accumulating water can not be stored indefinitely on the mine site because of limited storage capacity. In addition, the Sherwood mill and tailings disposal system will not be available for use for an indefinite period because the Sherwood site will require reclamation and also because of the high annual cost of maintaining the complex. Preparation for the contingency requires building a pipeline between the Midnite Mine and Sherwood mill to transport the acid mine water to the mill for treatment using the mill chemical circuit, including mixing, thickner and settling tanks for the water decontamination and the lined tailings pond for disposal of the soil residue. The BIA considers that continuing accumulation of acid water at the Midnite Mine site constitutes a growing environmental and public hazard which requires BIA to prepare to take direct action if Dawn is unable. Dawn Mining Company does not have a detailed design for final reclamation/mitigation or long term control for the water accumulating at the mine site. Dawn Mine has only a partial approved operation plan for their water treatment facility with no proposed plan for permanent disposal of the sludge produced from water treatment.

ALTERNATIVES:

A. (Preferred Alternative) - To widen an existing BIA road to accommodate 30 ton haul trucks and construct a ten-inch pipeline above ground from the Dawn Mine to the Sherwood facility.

This action would assure access to a dispposal mechanism for acid mine water which has accumulated at the Dawn Mine site. This action would eliminate the possibility of further degradation of the environment which may result in the loss to future options and may cause irreversible effects to the Tribe's non-renewable resources.

B. To construct a three-lane haul road and above ground pipeline from the Dawn Mine to the Sherwood facility using the shortest route through undisturbed area following the topography.

This alternative is relatively the same as the preferred alternative in terms of availability of full access to the Sherwood facility for water treatment and disposal.

C. No action alternative. This action would result in the loss to future options and cause irreversible effects of the Tribe's non-renewable resources, including the degradation of the Tribe's fisheries and Lake Roosevelt which is down gradient to the Dawn Mine site.

mlw/Haggard:DawnEA1
03-27-89

DESCRIPTION OF EFFECTED ENVIRONMENT

The Spokane Indian Reservation, Stevens County, Washington, is 154,665 acres bounded on the west by the Columbia River, on the south by the Spokane River, on the east by Chamokane Creek and on the north by the 48th parallel, established by Executive Order in 1881.

1) LAND RESOURCES:

The Reservation lies along the southern border of the Okanogan Highlands province which is related geologically to the Rocky Mountains 60-miles to the east of the Reservation. The province is physiographically characterized by moderate slopes, broad rounded summits and extensive pleistocene glacial influence. Land forms within the Reservation reflect a combination of weathered and eroded glacial activity and weathered remnants of a regional granitic batholith, Belt series metasediments and miocene volcanic flows and tuffs. The topography of the Reservation varies from a broad valley and high plains on the east to rugged mountainous terrain in the north central part of the area. Moderate sloping foothills and meadow valleys are characteristic of the western area and some of the southern areas. Narrow flood plain terraces border the Spokane and Columbia Rivers with basalt bluffs or steep sand slopes shaping the rim. The land forms, within these units as a whole, show remnants of weathering, flooding, glacial influence and non-glacial influence. Elevations range from 1300 feet to 4000 feet.

For the purpose of clarity in this assessment, the Reservation has been divided into five (5) physiographic regions:

1. MID ELEVATION PINE UNIT (elev. 1800 feet to 4000 feet): characterized by moderate sloping glacial foothill terrain with some non-glacial mountainous terrain. Forest habitat types typical of the region are Ponderosa Pine/Bluebunch Wheatgrass and Ponderosa Pine/Bitter Brush

2. CENTRAL MOUNTAIN REGION (elev. 2300 feet to 4000 feet): characterized by glacial drift foothills with some non-glaciated mountain terrain in the northernb part of the region. Forest habitat types typical of the region are Ponderosa Pine/Snowberry and Douglas-fir/Pinegrass.

3. UPPER PLATEAU UNIT (elev. 2300 feet to 2700 feet): characterized by plains of glacial drift and alluvium with underlying bedrock composed of granite or basalt. Forest habitat types typical of the region are Ponderosa Pine/Snowberry and Douglas0fir/Ninebark.

4. VALLEY PINE REGION (elev. 1300 feet to 2200 feet): characterized by basalt bluffs with terraces of glacial lacustrine and flood deposits. Forest habitat types typical of the region are Ponderosa Pine/Bluegrass and Ponderosa Pine/Snowberry.

5. RIVERBREAK REGION (elev. 1300 feet to 2200 feet): characterized by terraces of glacial lacustrine and flood deposits. Forest habitat types typical of the unit are ponderosa Pine/Bluebunch Wheatgrass and Ponderosa Pine/Bitterbrush.

2) LIVING RESOURCES:

For the purpose of most efficient resource management by the Spokane Tribe and BIA, the Reservation has been subdivided into five regions which possess distinctive physiographic characteristics. All areas within each of the five regions described above contain sufficient similarities in forest vegetation type, biological/zoological communities, land use (human habitation included) accessibility, climate and topography. Typical to the Okanogan Highland foothills are small areas with anamalous physiographic characteristics within regions of gross similar distinctive characteristics. An example is small (less than 1/2 acre) widely scattered occurrences of the Ponderosa Pine/Needle and Thread forest habitat type on the extreme Southern Reservation. However, in general, the 5 regions can be accurately described in gross aspect.

Biological, zoological communities and associations are generally coincident with the five described physiographic units and with the included forest habitat types. For the purpose of wildlife management, ten biotic ecosystems are described for the Reservation: (1) Ponderosa Pine, (2) Mixed Conifer, (3) Grand fir-mesic, (4) Steppe, (5) Agricultural, (6) Riparian, (7) Creeks, (8) Lakes and Ponds, (9) Lake Roosevelt-Spokane River, and (10) special habitats (including scree, cliffs, rock outcrops, and caves). These ecosystems have been surveyed with the intent of measuring the diversity of vertebrate species and the production of permanent residents and to determine seasonal use by migrating species. Survey results measured by diversity of avian species indicate the greatest diversity in the riparian ecosystems followed in decreasing order, mixed conifer, ponderosa pine, steppe and grand fir-mesic. These results provide a general order of biotia diversity and allow consideration of the effects of resource management techniques.

Surveys have confirmed the presence, on the Reservation of 140 vertebrate species including 104 birds, 28 mammals, 4 reptiles, and 4 amphibians. Several additional species are reported by residents. No known endangered or threatened species inhabit the Reservation. Biotia ecosystems are considered individually by resource managers during planning for each of the five physiographic regions. Vertebrate confirmed as resident to the Reservation include Pacific rattesnakes, bullsnakes, blueracers, western toad tiger and long toed salamander, Pacific tree frog, northern pocket gopher, deer mice, yellow pine chipmunks, boreal red-backed moles, vagrant and pygmy shrews, coyotes, skunks, bobcats, black bears, hoaly marmots, mule and white-tailed deer, hairy three-toed northern black backed and pileated woodpeckers, pygmy nuthatch ravens, magpies, red-tailed hawks, great horned owls and osprey.

3) CLIMATE:

The climate on the Reservation within the area/region of these units is dry, with much of the annual precipitation occurring as snowfall. The average annual precipitation ranges from 18-inches to 21 inches in lower elevations with precipitation ranging up to 32 inches in the higher elevations. The average annual air temperature is about 43 degrees fahrenheit with high temperatures reaching 110 degrees farenhite in the summer months and low temperature reaching -30 degrees fahrenhite in the winter months. The frost free season is 90 to 125 days.

4) SOILS:

The soils within these five physiographic regions vary depending on topography and underlying rock types. In the regions of basins, bottomlands, plateaus, terraces, alluvial fans and the lower elevatic , of the foothills, the soil is deep to very deep and well drained, with silt loam, derived from glacial drift, volcanic ash, loess and metasediments. Soils of the higher elevation foothills and mountainous terrains are also deep and well drained. The texture is loam to gravelly loam reflecting the weathering of granite, gneiss or micaceous rock types.

5) SITE:

The physiographic province covered by this proposal is characterized by moderate sloping glacial foothill terrain with some non-glacial mountainous terrain. The rock types consist of metasediments, granites, volcanics and glacial drift showing alteration from glacial outwash. In the area by Little Chamokane Creek, there are minor remnants of basalt flows. The elevation ranges from 1800 feet to 4000 feet. Forest habitat types typical of the unit are Ponderosa Pine/Bluebunch Wheatgrass, Ponderosa Pine/Idaho Fescue and the most dominant type, Ponderosa Pine/Bitter Brush. Douglas fir/Snowberry communities occur where available.

6) AMBIENT AIR QUALITY:

Ambient air quality is considered to be excellent by EPA air quality standards with the exception of periods of nearly uncontrolled forest fires, controlled slash and stable burning and infrequent dust storms.

7) CULTURAL RESOURCES:

A specific survey by qualified professionals has been conducted over the Reservation for archeological, cultural and religious resources. Individual sites have been identified including areas which provided digging and gathering of various roots and herbs.

8) WATER RESOURCES:

Average annual rainfall for the Reservation is 20 inches. Surface water exists at the Reservation boundary streams, numerous scattered, small spring-fed lakes and pot holes, and many perennial and intermittant streams draining the interior Reservation emptying into the boundary streams (Columbia and Spokane Rivers and Chamokane Creek). The topography of the Reservation generally rises from the east, south and west boundary streams toward the northcentral area, which produces a dendrites drainage pattern radiating from the north central area. The interior Reservation contains approximately 15 perennial streams ranging in size, measured by average stream channel width, from 2 to 15 feet. Three of these streams provide sport fishing for Tribal members. Four small (less than 40 acres) lakes are stocked with trout for sport fishing. All interior Reservation surface water provides water for wildlife and livestock. The boundary rivers and streams provide municipal, industrial and agricultural water. The Coulee Dam Reservoir provides sport fishing and recreational boating. Groundwater on the Reservation generally is found in small structurally controlled aquifers or under glacial drift terraces and flood plains.

9) SOCIO-ECONOMIC CONDITIONS:

The current existing population on the Reservation is 1494, which includes both Indians (1198) and non-Indians (296). The 1494 permanent Reservation residents occupy 452 single-family dwellings. Eighty-percent of these dwellings are distributed between three housing clusters, Wellpinit in the central Reservation, Ford on the east central boundary and McCoy Lake near the west central boundary. The remainder are scattered along the east, west, and south central boundaries resulting in a housing density of approximately two dwellings per square mile in these areas. School-age children living on the Reservation attend both primary and secondary schools at Wellpinit except for those children living at the McCoy Lake housing development on the West End boundary of the Reservation. Those children attend both primary and secondary schools off the reservation at the small community of Hunters, Washington.

Employment within the Reservation and the three small communities (Ford, Springdale and Hunters) which are nearby is in silver and uranium mining and milling, local construction, logging, government services (BIA and Tribal), and operations of small farms.

Total employed work force on the Reservation is 305, with 137 working for the BIA and the Tribe, 42 working in uranium mines and 126 working in other areas of employment (logging, construction, etc.). Unemployment is in excess of 50 percent causing some Reservation residents to commute to Spokane (60 mile

distance) for employment. Tribal government officials and planners are currently trying to stimulate growth in irrigated farming, cattle feeding, light manufacturing, and tourism to supplement tribal income and employment.

10) RESOURCE PATTERN USE:

Land use of the Reservation include. logging, mining, agriculture, grazing, hunting, gathering and transportation network. Access to the Reservation is provided by Washington State Highway 25 on the west and 231 on the east.

Approximately 25,000 total acres of tribal, allotted and deeded land is farmed for grain or hay with approximately 2,000 acres irrigated. Farm land is scattered cleared tracts, valley bottoms, meadows in the interior Reservation, and along the boundary streams on valley terraces. Approximately 3,000 head of livestock, owned by tribal members are grazed under Tribal permit on Tribal land. Two open-pit uranium mines and leases occupy 1350 acres total of tribal and allotted land.

The Reservation is traversed east to west by an oiled Stevens County road and numerous graveled BIA system roads. The density of accessible roads on the Reservation averages three traverses per section of land.

Fishing, gathering and big-game hunting provide important supplements to individual family income for Reservation residents and game management is an important consideration in all resource planning.

ENVIRONMENTAL CONSEQUENCES:

Alternative 1 - (Preferred Alternative)

1.) LAND RESOURCES:

Alternative 1 will result in soil compaction along the haul/service road during the period that construction is implemented. Soil disturbed by construction of an above ground pipeline and haul road may be subject to sheet and rill erosion during the period that ground cover from reclamation after use is re-established.

2.) WATER RESOURCES:

During the period of construction stream drainages will not be disturbed by Alternative 1. Silt will be introduced into surface water only if erosion occurs. The road will be regraded to control erosion and stream sedimentation.

3.) AIR QUALITY:

During the initial period of road widening, Alternative 1 will produce wind-blown dust from the road construction. Dust control measures during the construction and use of the road will be ongoing by use of water trucks.

4.) LIVING RESOURCES:

Wildlife habitat will be disrupted on land being used directly for widening of the existing road (road construction) and traffic on areas adjacent or nearby. Road construction may interrupt mitigation of paths and use by both wildlife and grazing livestock. The reclaimed/revegetated area surface will restore some utility to the surface use as forage and grazing. Habitation for borrowing animals and animals who depend on native plant species will be curtailed just in the area needed to widen the existing road.

5.) CULTURAL RESOURCES:

There is no significant difference with the effect of all three alternatives on cultural resources.

6.) SOCIO-ECONOMIC CONDITIONS:

Alternative 1 will provide employment and income to residents and Tribal members. No changes in demography or community infrastructure will result.

7.) RESOURCES USE PATTERN:

Hunting and gathering patterns will not change but may increase due to improved access to existing roads. The fishing will not change. Farming practices will not change. Mining practices may change depending on action taken for final design/reclamation for the Dawn Mine site. The transportation network, including access to remote areas will not change, but an existing road will be improved and maintained. Game animals may need to find better refuge from hunters as habitat areas, due to the improved road, may increase its use by hunters.

8.) OTHER VALUES:

There is no appreciable difference between the sound and noise or effects on public health and safety of Alternative 1 and 2. Alternative 3 will not effect the sound and noise resulting from no action, but will have an adverse effect on public health and safety because Dawn Mine water levels will not be maintained and lowered at levels considered in Alternatives 1 and 2.

ALTERNATIVE 2

1.) LAND RESOURCES:

Alternative 2 will require greater surface disturbance and more prolonged construction period than 1. This will require the removal and clearing of more area for use. Soil compaction on the constructed road and sheet and rill erosion will be greater with Alternative 2 than with 1.

2.) WATER RESOURCES:

The effect of silting surface streams by road construction activities will exist and may be ongoing due to the construction period of a new road is greater than with Alternative 1. Alternative 2 would disturb two stream drainages.

3.) AIR QUALITY:

More wind-blown dust will be produced under Alternative 2 than 1 and for a more prolonged period of time.

4.) LIVING RESOURCES:

Alternative 2 will cause a reduction of forest habitat types and biotic species diversity. Continued maintenance of haul/service road will cause a continued interruption of wildlife habitat and migration routes. Livestock grazing patterns will change as forage is reduced from surface disturbance. The surface disturbed will be reclaimed and revegetated the same as Alternative 1 and will restore some utility to the surface use as forage and grazing.

5.) SOCIO-ECONOMIC CONDITIONS:

Alternative 2 will provide employment and income approximately the same as 1 except for a longer period of time for construction of a new road.

6.) RESOURCE USE PATTERN:

Hunting and gathering patterns will change as access to remote areas will be increased. Alternative 2 will provide access to remote areas of winter deer migration where access has not yet been made available by road. Game animals will be more accessible to hunters, and may need to find new winter refuge as a habitat area. There will be an appreciable change in the transportation network but will not be open for public access as a through road. Farming practices will not change. Mining practices will change, the same as with Alternative 1. Fishing will change in Blue Creek because of surface disturbance causing increased surface water turbidity.

ALTERNATIVE 3

1.) LAND RESOURCES: (No action alternative)

Alternative 3 will result in the least land surface disturbance including soil compaction from construction machinery, vehicles and continued maintenance and consequent water erosion.

2.) WATER RESOURCES:

Surface water and ground water quality down gradient from the Dawn Mine site will remain and same for an undetermined amount of time with Alternative 3 compared to 1 and 2. Surface water and ground water may become contaminated by acid water entering the ground water flow regime from the Dawn Mine site.

3.) AIR QUALITY:

No dust will be produce from road construction and the air quality will remain the same.

4.) LIVING RESOURCES:

With no access constructed to remote areas, this alternative will result in uninterruptions of wildlife habitat and wildlife migration routes.

5.) SOCIO-ECONOMIC CONDITIONS:

The employment in the community will remain the same.

6.) RESOURCE USE PATTERN:

The no action alternative may result in the loss to future options for final mine design/reclamation to the Dawn Mine site and may cause irreversible effects to the Tribes non-renewable resources down gradient to the Dawn Mine site including resources in Lake Roosevelt. The net effect may cause damage to Fisheries and Wildlife habitats.

mlw/Shellie:DawnEA
03-27-89

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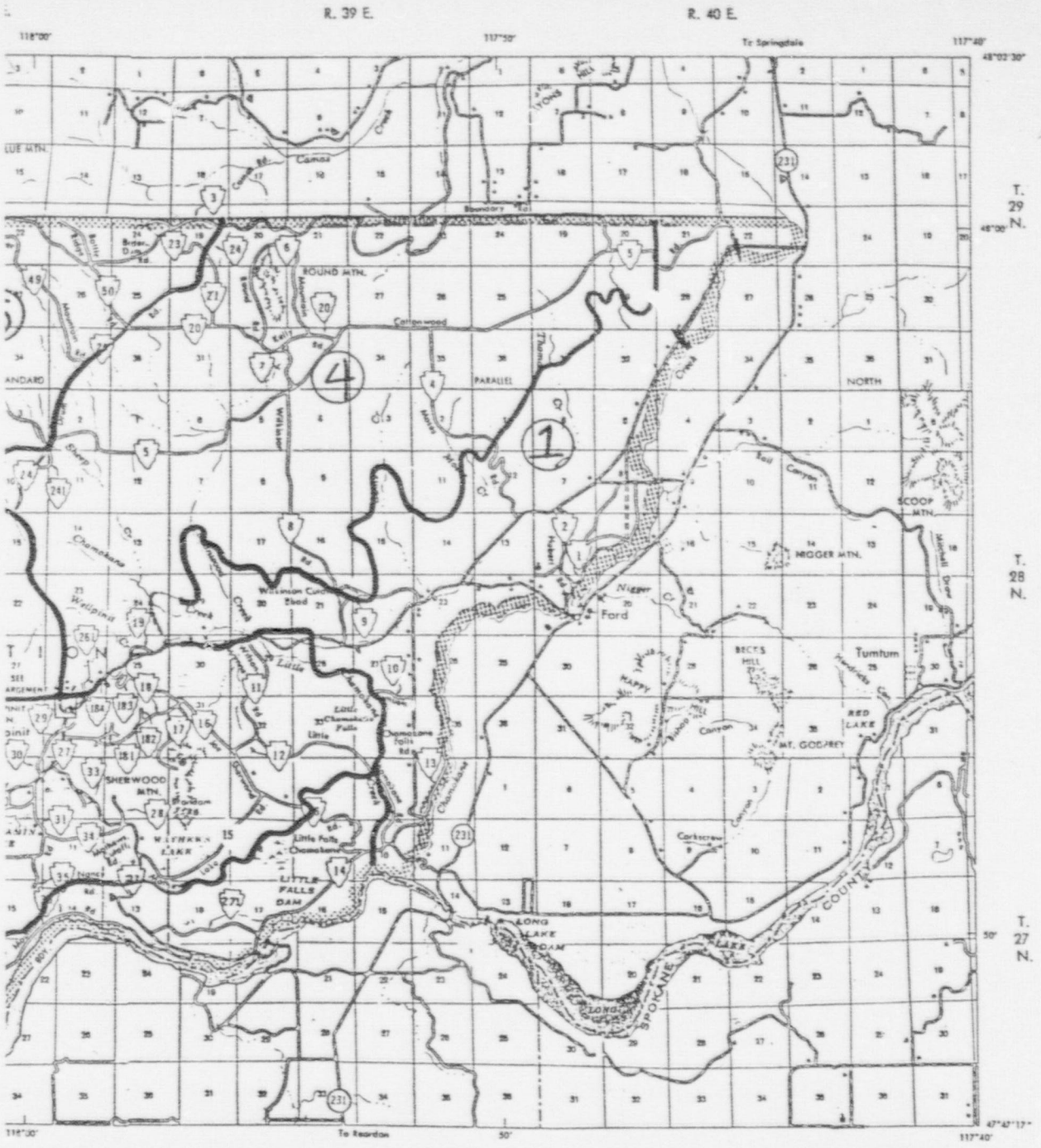

HIGHWAY SYSTEM MAP
WESTERN WASHINGTON AGENCY WASHINGTON
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

Proposed Haul/pipeline route

DISTRIBUTION LIST

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