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FISH AND WILDLIFE SERVICE
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February 7, 2007

Garth Zimbelman
Juneau Regulatory Field Office
U.S. Army Corps of Engineers
8800 Glacier Highway, Suite 106
Juneau, Alaska 99801-8079

ATTACHMENT 12

Re: Lemon Creek POA – 1983-20-N, Comments on revised project proposal

Dear Mr. Zimbelman:

Thank you for the opportunity to comment on the modified permit application submitted by Mr. Jan Van Dort, representing Mr. Ralph Horecny, owner of gravel resources contained within his property, U.S.S 204, Plat #2005-13, in Lemon Creek, Juneau. We offer these comments to you based on our evaluation of the applicant's revised project plans and the information contained in the 15-day notice dated January 24, 2007.

From the revised application materials, we understand the current proposal contains the following work elements:

1. Excavation of up to 200,000 cy of sand and gravel from 9.55 acres of the mainstem and confined floodplain of Lemon Creek upstream of the Old Glacier Highway Bridge. The excavation and associated activities are proposed to occur during 2007-2009 (Sheets 2-4 of 7), or until the permitted volume of materials is removed. The excavation planned for 2007 ("odd year") is to excavate alternate "islands" of gravel materials in the floodplain, with small berms to isolate the excavation from the Lemon Creek thalweg. Post excavation, the mining depressions will be linked through a series of short riffles, with berms training the flow to abandon its former thalweg. In 2008 ("even year") the remaining lateral banks of gravel would then be removed until an approximately uniform bed elevation is reached spanning the floodplain for the length of the property (approximately 1900 ft.). As proposed, future entries into the creek would repeat the "even-odd year" excavation sequencing.
2. Excavation and diversion activities are proposed to occur anytime from May 15 to March 15. No entry into the creek between these times is proposed in order to protect emerging salmonid fry and outmigrating smolts.

3. Placement of an estimated 1,750cy of the excavated native gravel materials for the creation of “even-odd year” diversion berms (estimate will require at least 8 “island” isolation berms in 2007 and a linear configuration of berms for 2008) in order to separate the active channel of Lemon Creek from the excavation activities. The project will also require the discharge of temporary rock fill (approximately 327 cy) and a series of five culverts for an access ramp to Anka Street.
4. The applicant will also discharge approximately 100 cy of large woody materials encountered during the excavation for the purpose of creating mid-channel or lateral “hard points” to promote the formation of gravel bars. This will occur at the conclusion of mining.
5. We understand that the applicant will process and stockpile the sand and gravel at an offsite upland location. After project completion, the diversion berms would be removed and leveled with the streambed. The temporary access ramp and culverts will be removed seasonally.

Existing Conditions- Lemon Creek:

Lemon Creek has been highly modified by community development activities since the 1960’s and has also been the source of past and recent biological, hydrological, and geomorphic study. We incorporate that information by reference here, where fish utilization is characterized in the Juneau Fish Habitat Assessment (Bethers, et al 1995), fish habitat and baseline inventory of habitat features in the Lemon Creek Baseline Aquatic Habitat Characterization (ADFG, 2004), and a detailed evaluation of hydrology, sediment transport, and flood hazards in the Lemon Creek Watershed Geomorphic Assessment and Sediment Management Alternatives Analysis (CBJ, et al, 2004). In total, these documents provide an objective and quantitative foundation for evaluating development projects in Lemon Creek as well as providing concepts for developing site-specific mitigation/reclamation plans.

This project impacts a large proportion of the confined floodplain in the lower Lemon Creek watershed and will result in the temporary simplification of the flow patterns, floodplain, and fish habitat in an already highly contained water body. This revised project proposal for the “even/odd year” project phasing is a significant improvement to the original proposal and is currently at the design level the review agencies would expect at the pre-application phase. The proposed project plan continues to lack a written mining and reclamation plan, a basic suite of Best Management Practices, order of operations, schedule, or sediment and turbidity controls, as most of the project is described in a series of letters from the applicant.

As we have discussed at the project coordination meetings with the applicant, DNR, CBJ, NMFS, and the Corps, and from recommendations from our previous letter dated December 14, 2006, our comments include the following:

1. The project proposal continues to lack an engineering plan sheet with adequate detail. The figures provided for regulatory review meet minimum requirements for distribution, but lack the standards of engineering practice for site development plans for a project of this size. Without a topographic survey, pre- and post- extraction elevations, and project

staking and layout services to support the project plans, how will any authority regulate the excavation or discharge volumes of gravels from the creek? As we recommended in our previous letter, we recommend a detail plan view/image of the project, at a size, scale, and resolution adequate for meaningful interpretation and project management. This site plan will be a useful tool for the anticipated future adaptive management dialogs with the excavation contractor as well as with agency staff for final site grading and reclamation.

2. We acknowledge that there is an inherent lack of an understanding of how the creek flow and future gravel deposition will respond after the second year of the excavation sequence. Therefore, to manage for this uncertainty, we recommend that the permit governing this work be issued for a maximum duration of two mining events (one “even” and “odd” year), with an annual interagency review of the work to calibrate the approach (if necessary) for the next year’s mining entry. Given the scale of the discharge and excavation activities in the active floodplain of Lemon Creek and its associated impacts to fish habitat, these permit restrictions and annual dialogs can serve to actively manage this project in collaboration with the resource agencies, the Corps and the applicant.
3. We recommend that all work within the Lemon Creek floodplain be carried out during the baseflow months from December 1 through March 15. With the adoption of the “even-odd year” mining approach, impacts to incubating eggs in the stream gravels are largely avoided. After reviewing the USGS period of record (19 water-years) for monthly mean discharge in Lemon Creek, flows from June through September are 27 to 46 times larger than flows in January, for example. We anticipate that equipment entry into the creek and discharge of berm materials and excavation of gravel can occur with lesser environmental risk from fuel/fluid spills, berm failures, and turbidity release with the requirement of this timing window.
4. The applicant, in addition to the avoidance of impacts from adoption of the “even-odd year” mining approach, proposes to discharge 100cy of woody materials for habitat enhancement purposes and to promote the aggradation of gravel bars for chum salmon spawning substrate. Mitigated mining concept drawings have been proposed in the CBJ 2004 report, and habitat feature metrics for a stream reach including the entire applicant’s property are included in the ADFG 2004 report. These metrics serve as simple benchmarks for re-creating habitat features post-project as part of mitigation/reclamation efforts for this project. At a minimum, we strongly recommend that the applicant develop a typical design drawing for one each; a mid-channel wood/rock cluster and a lateral-bank wood/rock cluster. These typical designs can then be constructed in consultation with agency staff, owner, and contractor input. We offer our staff time to research and develop these typical schematics with the applicant.

Thank you for the opportunity to further evaluate this project proposal and we appreciate your efforts to work towards an agreeable project outcome. We anticipate that the above comments can be practicably incorporated into the project plan and permit. Please call Neil Stichert on my staff at (780-1180) if you have any questions.

Sincerely,

Bruce G. Halstead
Field Supervisor

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