

**Large Dam Projects Application Review**

**FY2013 Request: \$506,000**  
**Reference No: AMD 54913**

**AP/AL:** Appropriation**Project Type:** Construction**Category:** Natural Resources**Location:** Statewide**House District:** Statewide (HD 1-40)**Impact House District:** Statewide (HD 1-40)**Contact:** Jean Davis**Estimated Project Dates:** 07/01/2012 - 06/30/2017**Contact Phone:** (907)465-2422**Brief Summary and Statement of Need:**

The purpose of Large Dam Projects Application Review is to fund the work necessary to issue Certificates of Approval for the construction and operation of large dams based on relatively large fees. Large dams are needed for the development and operation of mines and for hydroelectricity, which are consistent with the Department's mission. AS 46.17.020 allows the Department to retain consultants to assist in the performance of its duties under the respective dam safety statutes and regulations. In order to conduct timely and competent reviews of complex designs, the Dam Safety Unit must utilize this provision of the statute to retain qualified consultants under existing term contracts with the Department.

<b>Funding:</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>Total</b>
Stat Desig	\$506,000	\$41,000	\$10,000				\$557,000
<b>Total:</b>	<b>\$506,000</b>	<b>\$41,000</b>	<b>\$10,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$557,000</b>

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Additional Information / Prior Funding History:****Project Description/Justification:**

This is a new FY2013 capital project due to information received from the industry that occurred after the December 15 release of the Governor's budget.

The Dam Safety and Construction Unit (Dam Safety) within the Division of Mining, Land and Water, receives statutory designated program receipts (SDPR) as fees required with applications for *Certificates of Approval* for the construction, modification and operation of dams, which are issued by the Department of Natural Resources under 11 AAC 93.171. The fees are calculated according to 11 AAC 05.010(a)(8)(J) based on estimated design and construction costs, and paid by the proponent. In the near future, the operators of the Red Dog Mine must receive approvals to enlarge existing dams at its tailings storage facility to keep up with expanded production. The proposed development of the Donlin Gold Mine near Crooked Creek, Alaska will require up to seven dams to begin mining operations, currently scheduled for 2018. The fees from these two large mine projects are expected to exceed \$506,000. Other existing mining prospects such as Pebble will use state regulated dams if

the project develops. Recent advocacy for renewable energy is expected to result in more hydroelectric projects that may also use state regulated dams. The replacement dam needed for the Mahoona Hydroelectric Dam near Ouzinkie could generate a fee on the order of \$20,000.

The SDPR from application fees must be utilized by Dam Safety to provide regulatory oversight of the design and construction of the dams, which can span a period of 3 to 6 years. AS 46.17.020 allows the Department to retain engineering consultants through the state procurement process (AS 36.30) to assist in the performance of its duties under the respective dam safety statutes and regulations. In order to conduct timely and competent reviews of complex application submittals for large projects, Dam Safety must utilize this provision of the statute to retain qualified consultants under existing term contracts with the Department. Note that this approach promotes private sector employment. The consultants will provide: independent expert reviews of design concepts; assist Dam Safety in detailed technical reviews of site investigation reports, detailed design studies, construction specifications, plans, drawings, and other documents; conduct field inspections; and, review record of construction documents, operations and maintenance manuals, and other post construction documents. This work is necessary for the Department to issue the *Certificates of Approval to Construct, Modify, and Operate a Dam* as required by dam safety statutes and regulations.

Authorization in the amount of \$506,000 is requested to fund contractual support for large mine projects in FY2013. This will provide a funding mechanism for year-end carryover and other new projects expected later. Failure to review applications in a timely manner could lead to delays in issuing requisite permits that could result in violations of regulations by the applicant, shut down of the mine or other project, or costly construction delays. Failure to conduct a thorough technical review could contribute or lead to failure of critical systems that could threaten life or property downstream of the dams. A catastrophic failure of a large mine dam would have significant economic impacts on the mining operation, as well as major negative impacts on the mining industry at large and the State of Alaska.

### **Why is this Project Needed Now?:**

This project is imperative now for the timely review and approval of currently submitted applications for the expansion of the tailings storage facility at the Red Dog Mine, and expected applications in the scheduled permitting and development of the proposed Donlin Gold Mine. The large fees are indicative of the magnitude of the project and the volume of work required to design and build the dams, as well as the volume of work required to regulate them. Construction of the dam raise can take two to three years due to the short construction seasons in northwest Alaska. Failure to receive regulatory approval for the work within the scheduled timeline could cause the mine to violate the statutes and regulations in the best case, or to shut down mining and milling operations in order to avoid overtopping and failing the dam in the worst case. Permitting and construction for the proposed new dams at the Donlin gold prospect are long lead items that must begin well in advance of the proposed start of operations in 2018; therefore, the proponent is planning to begin the permit application process in 2013. Dam Safety must be able to utilize the SDPR for beginning the necessary work as soon as possible after the application fees are submitted. Having an on-going project in place will provide a mechanism for managing fees and funding work for future projects also.

