PERMANENT WATER IMPOUNDMENT

As per rule 880-X-10C-.20(2)(a, b, c, d, e, & f), sediment basin No. 004B was designed, approved, constructed and certified to meet all requirements of rules 880-X-8F.11(1)(b), 880-X-10C-.13, 880-X-10C-.17, 880-X-10C-.18, and 880-X-10C-.20(1 & 3). The operation and maintenance requirements approved in the design plans will remain in effect.

As per rule 880-X-10C-.20(2), sediment basin no. 004B the following is submitted.

(a) The proposed post mining land use for Basin 004B is Fish & Wildlife Habitat. The size and configuration of the proposed permanent water impoundment (PWI) is basically the same as shown in the approved design plans. The approximate surface area at normal pool, existing storage capacity, average depth of water and maximum water depth are as shown in the following table. The approximate surface areas are based on information provided in the approved plans and all other measurements are based on information presented in the most recent annual re-certification reports for each basin.

BASIN I.D.	APPROXIMATE SURFACE AREA (ACRES)	EXISTING STORAGE CAPACITY (AC.-FT.)	AVERAGE DEPTH (FT.)	*MAXIMUM DEPTH (FT.)
004B	1.70	9.6	7.0	8.0

* Maximum depth as measured from lowest point of basin to primary spillway elevation. The size and configuration of each PWI is suitable for the proposed post-mining land use. Each PWI will enhance the post-mining land use by providing wildlife refuge, and areas for fish habitat.

(b) The proposed post mining land use for Basin 004B is Fish & Wildlife Habitat. The quality of the discharge from the impoundment is suitable on a permanent basis for the intended land use (Fish & Wildlife Habitat). Samples of water have been collected, analyzed and reported since the beginning of mining. These analyses are recorded in the attached Discharge Monitoring Reports:

The attached water quality data indicates that the quality of each PWI is suitable for its intended use and is adequate to meet the requirements of rule 880-X-10C-.20(2)(b).

(c) The proposed post mining land use for Basin 004B is Fish & Wildlife Habitat. The water level in the proposed PWI does not fluctuate from the principle spillway elevation more than two (2) feet during periods of dry weather; therefore, the water level in each PWI is sufficiently stable and capable of supporting its intended use.

(d) The final grading slopes in the areas surrounding the dam & the pool area is no steeper than 2.5H:1V. Therefore, adequate safety and access is provided for the proposed water users.

(e) Because of the drainage areas of each of the proposed PWI's, location of the impoundments, the water quality and quantity, leaving these basins as PWI's will not result in the diminution of the

quality or quantity of water utilized by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.

(f) Based on the information and data presented, this impoundment is suitable for the proposed post-mining land use, which is Fish & Wildlife Habitat.

(g) The PWI's are adequate to safely pass the anticipated peak flows resulting from a 25 Year - 6 Hour precipitation event. Available freeboard during a 25 Year - 6 Hour precipitation event for each PWI is given in the table below.

BASIN	FREEBOARD
004B	1.70'

MAINTENANCE PLAN

The maintenance requirements approved in the detailed design plans will remain in effect. Permanent water impoundment 004B will be inspected regularly, at least monthly, with maintenance performed as necessary. Debris, which may have collected and clogged the spillway system, will be removed to allow the impoundment to function properly as designed. Any slope instability, slope failures, or eroded areas will be repaired and re-vegetated. Areas where initial vegetation was unsuccessful will be re-vegetated as necessary.

After the approval of Phase III Bond Release, the responsibility for the sound future maintenance, as outlined in these plans and the approved detailed design plans, for these impoundments will revert back to the individual landowners.

MODIFICATIONS NECESSARY PRIOR TO CERTIFICATION

None.

CERTIFICATION STATEMENT

I, hereby certify that the impoundment is designed, constructed and is being maintained to meet the requirements of Chapter 880-X-10 to the best of knowledge and belief.

PROFESSIONAL ENGINEER 9/24/14
DATE

P-3831 Bear Creek Mine

Standing Pool Samples

Sample Date	Pond ID	pH	Total Fe (mg/l)	Total Mn (mg/l)	TSS	Flow (cfs)
9/17/14	004	6.4	0.4	1.6	15	<0.01
9/17/14	004-A	6.5	0.1	2.4	14	<0.01
9/17/14	004-B	7.5	0.3	1.7	11	0
9/17/14	006	9.1	0.2	1.1	<10	0
9/17/14	007	7.7	0.1	0.2	<10	0
9/17/14	008	7.7	0.3	0.8	<10	0
9/17/14	015	7.3	0.1	1.8	<10	0
9/17/14	018	8.1	0.1	0.7	<10	0
9/17/14	001	8.6	0.2	1.6	<10	0
9/17/14	001-A	9.2	0.1	3.3	<10	0
9/17/14	003	8.2	0.4	2.6	<10	0
9/17/14	003-A	8.7	0.2	0.9	<10	0
9/17/14	010	6.2	0.1	1.0	<10	0