



TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

November 17, 2017

Amy Eschberger
Environmental Protection Specialist
State of Colorado
Division of Reclamation, Mining and Safety (DRMS)
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Denver, CO 80203

sent via email Amy.Eschberger@state.co.us no hard copy sent unless specifically requested

**RE: DRMS Permit M-1999-069 Kauffman/Wagner #3 Pit
Surety Reduction (SR) Application**

Amy,

On behalf of Jake Kauffman & Son, Inc. (JKS) I am happy to respectfully submit this formal request for Surety Reduction (SR) for the Kauffman/Wagner #3 (KW3) Pit. As you are aware from correspondence, discussions, and particularly site meetings and field trips conducted this Spring 2017, JKS has successfully completed liner construction for the "East Reservoir" area of the KW3 Pit. This completion was marked and noted by acceptance from the Colorado Division of Water Resources (DWR) on January 17, 2017, which I believe you have been copied on.

This liner construction was not subject to the recently completed Area Reduction (AR) action for KW3, due to the presence of a large topsoil stockpile on the East Reservoir bottom. Nonetheless, you had indicated that with the DWR acceptance of the reservoir liner construction, DRMS would be amenable to a significant Surety Reduction (SR) reflecting the successful completion of this important and expensive portion of the planned pit reclamation.

It is our finding and proposal that the required Surety for completion of the KW3 Pit reclamation be based on the following major elements:

1. Additional fill into the "West Cell" mostly-lined Pit area, in the amount of 15,000 cubic yards of import material.
 - a. This backfill material was the subject of the recently completed Technical Revision #4 (TR-4) action on the KW3 Pit this Fall.
 - b. The material will be inert, allowed import materials, in compliance with the TR-4 application by JKS and approval by DRMS.
 - c. This amount of backfill material is sufficient to lift all parts of the West Cell to a minimum two feet above maximum seasonal groundwater levels.
 - d. This action is provided to address DRMS and DWR requirements, to avoid evaporative groundwater losses through final, reclaimed pit grades.
2. Backfill of the "Triangular Area" to two feet above maximum seasonal groundwater levels has already been completed through this Fall season, 2017.

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3. Haul and placement of the 40,000 cubic yards of stockpiled topsoil material from the East Reservoir bottom to the following areas:
 - a. To the "Triangular Area" bounded by the City of Loveland Boyd Lake Avenue roadway right-of-way and embankment, the previously backfilled area to the north, and the Boyd Lake Outfall Ditch to the west/southwest;
 - b. To the West Cell area bounded by the Boyd Lake Outfall Ditch to the east/northeast, the previously backfilled area to the north, and the Pit permit boundaries to the west and the south.
 - c. It should be noted that the haul road used by JKS has been provided to, and will be retained and used by, the Boyd Lake Outfall Ditch, operated by the Greeley-Loveland Irrigation Company (GLIC).
 - d. This road is NOT to be reclaimed, but will remain as an access and maintenance road following final reclamation and ensuing planned after-use of the KW3 Pit property.
 4. All East Reservoir reclamation has been completed, including liner construction, bottom grading (upon topsoil removal per above item), shoreline riprap armoring or topsoiling, and revegetation.
 - a. DRMS staff had indicated this Spring that some of the grow-in areas of the vegetated shoreline may still be thin for coverage.
 - b. The applicant believes the overall revegetation area proposed with this application is sufficiently conservative to cover the intermittent areas where grow-in is ongoing.
 - c. The East Reservoir perimeter haul road is required for reservoir access & maintenance by the future reservoir owner.
 5. The Boyd Lake Avenue right-of-way and embankment is owned by the City of Loveland, and the City has accepted responsibility for reclamation and maintenance of that area of the Pit.
 - a. The area has not been released from the Pit since JKS requires a haul crossing of the roadway embankment for the 40,000 cubic yards of topsoil material.
 - b. The remainder of the City of Loveland ROW ownership area is eligible for Area Reduction (AR).
 - c. JKS intends to seek release of this area following this SR application, or following removal of the topsoil stockpile material in the next few months' time.

The KW3 Pit was approved for Water Storage Reservoir use for the East Reservoir, Pastureland use for the "Triangular Area" and Lined Reservoir use for the West Cell. The TR-4 changed the West Cell reclamation approach and process by requesting the allowance of import inert material backfill of the Cell, but the TR-4 was not clear on the planned after-use.

To clarify, it is JKS' intention to reclaim both the "Triangular Area" and West Cell for Outdoor Storage after-use. Following recent discussions with you as the Permit EPS, however, it was determined that the clarification/update to the after-uses will require an additional Technical Revision, as a change in after-use cannot be processed via this Surety Reduction application.

For purposes of this SR application, then, all areas except the Boyd Lake Outfall Ditch including access and maintenance road areas, and the East Reservoir, will be topsoiled and reclaimed to Pastureland.

The related cost model for this reclamation would be as follows:

Item	Unit	Unit Cost	Quantity	Ext Cost
Inert Backfill (Import)	CY	\$0.85/CY *	15,000	\$ 12,750
Placement & compaction				
Topsoil	CY	\$2.00/CY**	40,000	\$ 80,000
Haul and distribution / placement				
Reseeding	ACRE	\$100/acre***	65.7	\$ 6,570
(a) Total Direct Costs (total of above item costs)				\$ 99,320
(b) Overhead & Profit at 10% of line (a)				\$ 9,932
(c) Total Direct and O&P Costs – lines (a) + (b)				\$ 109,252
(d) Engineering & Project Management at 5% of line (c)				\$ 5,463

Total Proposed Financial Surety **\$114,715**

* From 2006 JKS to DRMS Surety Reduction correspondence.

** Based on embankment fill Contract pricing between JKS and City of Loveland, pit bottom (with processing and loading) material to Boyd Lake Avenue embankment, with compaction.

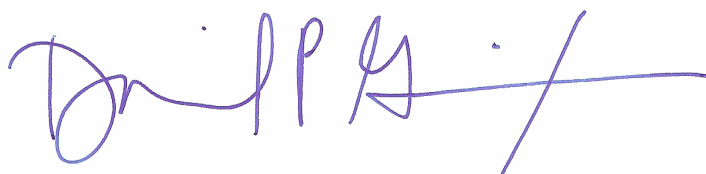
*** From JKS internal / in-house revegetation process and estimates for operator, equipment, and seed.

The net reduction in Surety would be from the current \$570,000 to the proposed \$114,715, equaling a \$455,285 reduction, or down 80% from the current Surety. We believe this is an equitable and reasonable reduction, and accurately reflects the significant reclamation progress of liner completion on the East Reservoir, as well as multiple Area Reductions completed and approved over the prior decade for final revegetation of the areas east of the East Reservoir.

Amy, this concludes our request for Surety Reduction for the Jake Kauffman & Son, Inc. Kauffman/Wagner #3 Pit remaining reclamation, following successful completion and acceptance of the East Reservoir liner. Please feel free to call or write me with any questions or concerns regarding this request. I look forward to working with you and your team in the coming weeks to successfully conclude this SR application.

Respectfully submitted,

Terramax, Inc.



Daniel P. Giroux, P.E.
President

