Balancing the Success of the North Dakota Oil Industry with its Responsibility to Reclaim and Restore Lands and Water

Submitted By:
Salt Contaminated Land and Water Council

- **Total Funding Request - $5,236,000**
  Total Project Costs - $5,236,000
  Project Duration – 5-10 years

Project Description

- Quantifying Salt-contaminated Soils from Oil and Gas Production in Western North Dakota, Documenting Effects on Surface Water Quality, Demonstrating Sustainable Remediation and Restoration of Salt-contaminated Soils, and Stakeholder Technology. Expected Results: 1. North Dakota will be able to sort salt contaminated lands from severely impacted to moderately to slightly to no lasting impact. 2. North Dakota will know with greater certainty what will be the cost with time and money to reclaim salted lands. 3. North Dakota farmers and local contractors will understand their role in cost effective reclamation.

TECHNICAL REVIEWERS' RATING SUMMARY

		Technical Reviewer			
Statement	**Weighting Factor**	**G-52-02A**	**G-52-02B**	**G-52-02C**	**Average Weighted Score**
Objectives	**9**	2	3	3	18
Achievability	**7**	2	2	1	7
Methodology	**8**	3	4	1	16
Contribution	**8**	2	2	3	16
Awareness / Background	**5**	2	2	4	10
Project Management	**3**	1	4	1	6
Equipment / Facilities	**2**	1	3	1	2
Value / Industry-Budget	**4**	1	2	1	4
Financial Match – Budget	**4**	2	3	1	8
Average Weighted Score		99	137	99	111
Maximum Weighted Score				**250 possible points**	

Technical Reviewer Totals

- G-52-02A

Average Weighted Score: **99 out of 250**

DO NOT FUND

- G-52-02B

Average Weighted Score: **137 out of 250**

FUNDING TO BE CONSIDERED

- G-52-02C

Average Weighted Score: **137 out of 250**

DO NOT FUND

Technical Reviewer Comments

Reviewer G-52-02A

The proposal contained limited reference to published or unpublished literature on site characterization or remediation options including the use of gypsum as a soil amendment for saline-sodic soils. The principal investigators Dr. Kerry Sublette and Ken Carlson are both highly qualified individuals on brine characterization and remediation. Unfortunately, the proposal, as written, doesn't fully explain how their knowledge will be utilized to maximize this effort. The proposed quantification of impacts from current and legacy oil production in 16 oil producing counties in western North Dakota could contribute significant knowledge to North Dakota. The use of new technologies to properly characterize and treat these identified impacts is equally significant. The engagement of local landowners, government, and environmental professionals would go a long way toward increasing knowledge on this subject. However, this proposal, as written, fails to communicate how this will be achieved and fails to justify the large capital expense of funding this project.

Recommendation: DO NOT FUND

Reviewer G-52-02B

There could be some value to some portions of the project, but the cost seems high compared to what other similar projects that have been done cost especially since this is to be a test. I gave a lower contribution rating because there have been studies in the past that have been close to the same as this project that have already proven that step 3 (remediation part) works.

Recommendation: FUNDING TO BE CONSIDERED

Reviewer G-52-02C

I cannot support funding this project as described. The authors need to specifically describe the 1.Objectives, 2. Methodology by objective, 3. Who is the team (people) responsible for achieving each objective and clearly describe why they have the expertise to conduct the work and create outcomes/results, and 4. a budget that describes costs associated by an objective and by year, broken up by labor, travel, equipment, supplies, contractors, etc. Their description of Task 6 of the budget on page 32 lacks any kind of detail on how the $4 million will be spent.

Recommendation: DO NOT FUND

Recommendation:

The applicant did not meet the minimum match funding requirement and failed to respond adequately to the questions and concerns outlined by the technical review team – Do Not Fund.