

APPENDIX 1.0-B

Technical Revision List

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POWERTECH (USA) Inc. DEWEY-BURDOCK PROJECT Technical Revisions

Powertech (USA) Inc. proposes the following list of technical revisions for which the Board of Minerals and Environment will authorize the Department of Environment and Natural Resources (department) to review and approve pursuant to ARSD 74:29:03:16.

- 1. Modify monitoring plans, locations, parameters, and time frames;
- 2. Modify monitoring analytical methods, limits of detection and reporting requirements;
- 3. Modify compliance limits for chemical parameters;
- 4. Modify the chemicals added to the lixiviant to include alternative oxidizing agents such as hydrogen peroxide and alternate complexing agents such as sodium bicarbonate;
- 5. Modify plans and specifications for permitted facilities;
- 6. Submitting and modifying quality control and quality assurance plans;
- 7. Add contiguous, affected land within the permit boundary with the total of such additions not to exceed twenty (20) percent of the permitted affected land area of 2,528 acres for this permit if deep disposal wells are used without land application to dispose treated wastewater or 3,793 acres for this permit if land application is used. The maximum amount of expansion allowed without land application (20% of 2,528 acres) is 252.8 acres, and the maximum amount of expansion allowed with land application (20% of 3,793 acres) is 379.3 acres;
- 8. Modify the mine plan within the constraints of ARSD 74:29:03;
- 9. Modify or relocate erosion, sedimentation, or drainage control structures;
- 10. Modify or relocate ancillary facilities within the permit boundary, including equipment storage areas, parking lots, office buildings, septic systems, perimeter fencing, utilities (phone lines, natural gas lines, power lines, water lines), sediment ponds, and stockpiles;
- 11. Modify well field configurations within permitted disturbance limits;
- 12. Modify mine designs and disturbance areas to include contiguous areas of potential ore;
- 13. Modify the recovery process within the processing facilities to improve performance, recovery or environmental aspects, including the potential recovery of vanadium;
- 14. Relocate processing facilities to improve operations aspects and recovery;
- 15. Relocate chemical or petroleum storage areas;
- 16. Develop and implement other mineral processing technologies that would improve both economic and environmental aspects;
- 17. Modify or relocate roads within the permit boundary;
- 18. Modify or relocate pipelines and utilities within the permit boundary;
- 19. Modify topsoil stripping plans and relocate topsoil and spoil stockpiles;
- 20. Modify the size of area to be worked at any one time;
- 21. Modify dust control measures;
- 22. Modify operating time tables for proposed operations;
- 23. Modify groundwater restoration methods or schedule;
- 24. Change, modify, develop, enhance, or increase water treatment technology and water treatment regimens;
- 25. Modify water usage and sources as allowed by water rights permits;
- 26. Modify water storage capacity and pond configurations;
- 27. Modify the size and configuration of the land application areas;
- 28. Modify the reclamation plan within the constraints of ARSD 74:29:03;
- 29. Modify the reclamation time tables for proposed reclamation and decommissioning;
- 30. Implementing new and improved reclamation techniques as they are developed;
- 31. Modify seeding mixtures or rates;



- 32. Use irrigation, fertilizer or nurse crops in reclamation;
- 33. Modify reclamation or vegetation performance standards;
- 34. Relocate, add or remove reference areas used to establish revegetation success;
- 35. Modify stocking guidelines and reclamation success standards to reflect climatic conditions;
- 36. Modify reclamation monitoring techniques;
- 37. Modify livestock carrying capacities of surrounding areas;
- 38. Modify areas designated with postmining land uses of rangeland or agricultural or horticultural cropland.
- 39. Modify designated crop types for areas designated with postmining land use of agricultural or horticultural cropland.
- 40. Modify reporting procedures and parameters as allowed within the mining laws and mine permit; and
- 41. Modifying postclosure plans and monitoring time frames;

Powertech (USA) understands that technical revisions must comply with ARSD 74:29:03:03 and must be submitted to the department in writing. The department shall approve, disapprove, conditionally approve, or request additional information deemed necessary to approve technical revisions within 30 days of receipt.