## 1.0 PERMIT APPLICATION AND INTRODUCTION

Through the submittal of this application, Powertech (USA) Inc. [Powertech], requests an Area Permit and authorization from the US Environmental Protection Agency (USEPA) to install and operate four to eight non-hazardous Class V disposal wells located at the Dewey-Burdock Project, pursuant to the applicable Underground Injection Control (UIC) regulations. The number of wells is to be determined and is dependent upon well capacity. Powertech requests authorization to inject a total of 300 gallons per minute (qpm) in a maximum of eight Class V disposal wells. These wells are to be located in Custer and Fall River Counties, South Dakota, within the limits of the proposed Class V permit area within the Dewey-Burdock Project boundary. Proposed locations for the first four wells are shown on Figure B-2. The Project is located approximately 13 miles north-northwest of Edgemont, South Dakota, and straddles the area between northern Fall River and southern Custer County line. The project boundary encompasses approximately 10,580 acres (4,282 ha) of mostly private land on either side of County Road 6463 and includes portions of Sections 1-5, 10-12, 14 and 15, Township 7 South, Range 1 East and Sections 20, 21, 27, 28, 29 and 30-35, Township 6 South, Range 1 East. Approximately 240 acres (~2%) (97.1 ha) are under the control of the Bureau of Land Management (BLM) located in portions of Sections 3, 10, 11, and 12. A map identifying the general project location is included as Figure 1.

A completed copy of USEPA UIC 7520-6, "Underground Injection Control Permit Application" for the wells is included in this application, and required attachments to this form are also included in this document. In this application, the initial four planned wells are referred to individually as Dewey-Burdock Disposal Well Nos. 1, 2, 3, and 4, (DW Nos. 1, 2, 3, and 4) or collectively with additional disposal wells as the Dewey-Burdock Disposal Wells. All depths discussed in this application are below ground surface (bgs) unless otherwise noted.

The proposed Powertech facility in South Dakota will operate between four and eight Class V Non-Hazardous Disposal Wells for underground injection of fluids from an in-situ leach (ISL) uranium mining project. Fresh water aquifers in the vicinity of the wells are to be protected by casing and cement. Injected fluids will be delivered to the Minnelusa and Deadwood Formations in separate wells under positive pressure injection through tubing and a packer. The wells are to have one cemented long string protective casing extending into the injection interval. The wellbores are to be perforated completions within the injection interval. The annulus area between the protective casings and injection tubing strings will be filled with inhibited fresh water. Annulus pressure will be continuously monitored to detect any potential leaks in the tubing or casing strings and annulus pressures will be maintained at more than 100 psi above the tubing pressure.

Relevant administrative data regarding the permit are summarized as follows.

Applicant:

Powertech (USA) Inc.

State:

South Dakota

Counties:

Custer and Fall River

**Facility Address:** 

310 2<sup>nd</sup> Avenue Edgemont, SD 57735

Mailing Address:

5575 DTC Parkway, Suite 140, Greenwood Village, CO 80111

Location of Planned Wells: Site 1: NE 1/4 of NW 1/4 of SW 1/4 of Section 2, T7S, R1E

DW No. 1: Lat: -103.971938654 Long: 43.469772181 DW No. 2: Lat: -103.971859557 Long: 43.4696483743

Site 2: SE ¼ of NW ¼ of SW ¼ of Section 29, T6S, R1E DW No. 3: Lat: -104.031570321 Long: 43.4971737527 DW No. 4: Lat: -104.031436264 Long: 43.4970792287

Location of Additional Wells: USEPA ID Nos.:

To be determined Dewey-Burdock Disposal Well Nos. 1, 2, 3, 4, and additional wells- TBD

Mr. Richard Blubaugh, Vice President Contact:

## FORM 7520-6 PROPOSED WELLS UIC PERMIT APPLICATION

		United States Environmental Protection Agency											Number		17E						
<b>₩EPA</b>				Unde	nderground Injection Control													Т//	4	С	
					Permit Application													$\overline{\Gamma}$	$\neg$	П	
					cted under the authority of the Safe Drinking ter Act. Sections 1421, 1422, 40 CFR 144)														. ]		
Read Attached Instructions Before Starting For Official Use Only																					
Application approv	receive	ved Permit Number					Well ID				FINDS Number										
mo day year mo day					year																
															J [						
	i (i). (	Owner N	lame	and A	Address										Vame an	d Address		A.A.			
Powertech (USA)		<del></del>	*********	,	Owner Name Powertech (USA) Inc.										$\neg$						
Street Address							ne Numb		Street Address					Phone Number							
5575 DTC Parkway, Suite 140					04-4-	(30:		5575 DTC Parkway, Suite 140									0-75	528			
Greenwood Village					State						Villa	Village State ZIP COI 80111								$\neg$	
IV. Commercial F						I. Legal Contact					14.5° V	/II. SIC Code	8 3		*	200					
Yes X					Private					Owner SIC: 1					VII. SIC Codes						
☑ No				Federal 🗍					1010.					1094 SC: 212291							
					Other					·											
	5 12					,	VIII. Well	Sta	tus ः(	Mark "x")	الرواني بالجدو براغم به		A to be				( 200 g	K. L. 2	y Y		
ΠA		Date Sta	arted							nversion					roposed		,				
	mo	day	′	year	_	للسطا									•						
Operating	Operating																				
				į.	X. Type of	Permit	Requeste	d	(Merk	"x" and s	ecify	If req	quired)	ax.		的,《相解传》 《《中心传》			7°.		
A. Individual B. Area				Number of Existing Wells					umber of Proposed Wells Name					(s) of field(s) or project(s)							
									4 - 8	- 8				wey-Burdock							
Boros - was stock to be a construction		September States Committee																			
	X. Class and Type of Well (see reverse)														14.50	A. Carrier					
A. Class(es) (enter code(s))	i. I . 'i'ii. Ir				C. If class is "other" or type is coo Class V, permitted under 40 CF									r of wells per type (if area permit)							
					.iass ν, μ	cimine	rk i														
Other									····												
	5+1 A	XI. Lo	catlo	n of W	Vell(s) or Approximate Center of Field or Project											XII. India	Land	e (Ma	rk 'x'		
Latitude	Ļ	Longitude			<del>                                     </del>		wnship and Range					.		Yes							
Deg Min Sec 103 59 43	De   43	g   Mi   28		Sec 55	Sec 34	6S	Range	-	4 Sec W	Feet From	뀌뚮		Feet Fro 1403	4	S	<b>I</b> No		,			
	- 128/2		<u> </u>		j		XIII	1	achme	nts			0/9/W				NA.		0.000	ette i se	
(Complete the following	ng qu	estions	on a	separa	ate sheet(	s) and n		_	0.51	3	uction	s)	AND THE RESERVE OF		apriktiji s. 11	and the relative has		or Chinage		Stern Br	
For Classes I, II, III, (a required. List attachr												-U (p	p 2-6) as	ар	propriat	e. Attach ma	aps wh	ere			
	State 1	JAP					XIV	. Ce	rtifica	lon		(32)		No.							
	I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true,																				
and that, based on my accurate, and comple imprisonment. (Ref. 4	te. la	ım awar	e tha			_	-			-								ie,			
A. Name and Title (T														T	B. Phone No. (Area Code and No.)						
Richard Blubaugh,			nt - I	Enviro	nmental											790-7528					
C. Signature					-									Т	D Date	Signed					

