		<u>A. (A. (A. (A) (A) (A) (A) (A) (A) (A)</u>	<u> </u>			
KC For •84)	m 374 - U.S. NUCLEAR REGU	LATORY COMMISSION	PAGE . 1 OF 5 PA			
	MATERIAI	s license pil	ease 1-29-91			
Pursuar Code o heretof source, deliver license subject conditi	nt to the Atomic Energy Act of 1954, as amended, the Ener of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, ore made by the licensee, a license is hereby issued authoriz and special nuclear material designated below; to use such or transfer such material to persons authorized to receive shall be deemed to contain the conditions specified in Se to all applicable rules, regulations and orders of the Nucl ons specified below.	gy Reorganization Act of , 35, 40 and 70, and in re- ting the licensee to receive material for the purpose( it in accordance with the ction 183 of the Atomic lear Regulatory Commissi	1974 (Public Law 93-438), and Title I eliance on statements and representation , acquire, possess, and transfer byprodu s) and at the place(s) designated below; regulations of the applicable Part(s). The Energy Act of 1954, as amended, and on now or hereafter in effect and to a			
	Licensee		<u> </u>			
1.	Combustion Engineering, Inc.	3. License number	SNM-33 Amendment No. 18			
2.	P. O. BOX 107 Hematite, Missouri 63047	4. Expiration date	December 31, 1989			
		5. Docket or Reference No.	. 70-36			
6. Byp spec	roduct, source, and/or 7. Chemical and ial nuclear material form	/or physical	8. Maximum amount that licensee may possess at any one time under this license			
	A. Uranium enriched to A. Any, maximum 5.0 weight powde percent in the U-235 isotope	excluding metal r	A. 8,000 kilograms contained U-235			
	B. Uranium, any U-235 B. Any enrichment		B. 350 grams			
	C. Source material C. Any, (Uranium and Thorium) powde	excluding metal	C. 50,000 kilograms			
	D. Cobalt-60 D. Seale	d sources	D. 40 millicuries, total			
	E. Americium-241 E. Solid	sources	E. 200 microcuries			
9.	Authorized use: For use in accordance conditions contained in Part I of the 1 February 26, 1982, and supplements date May 31, 1984; April 29, June 6, and Oct May 1, August 18, October 23, October 2 January 12, March 16, and September 4, January 20, 1986, and March 30, 1987.	with the statemen icensee's renewal d July 21, 1982; i ober 11, 1988; an 6, and November 8 1990, and letters	ts, representations, and application dated February 21, 1983; d February 10, March 22, , 1989 (2); and January 3, dated February 29, 1984,			
10.	Authorized place of use: This licensee as described in the referenced license	's existing facil renewal applicati	ities in Hematite, Missour <sup>.</sup> on.			
11.	Quarterly inspections by the Supervisor preplanned and shall be documented. Su years.	, NLS&A, or his range of the second sec	epresentative shall be shall be maintained for 2			
			71-76			

NRC	Form 374/	U.S. NUCLEAR REGULATURY COMMISSION	PAGE	2	OF	5	PAGES
(5-84	)		License nui		10		
		MATERIALS LICENSE	SNM-33 Amenamen	C NO.	18		
		SUPPLEMENTARY SHEET	70-36	:1			
					·		
			·		JAN	29	1991
			<u> </u>		<u> </u>		
12.	A writ months releas	ten report shall be made by the NLS&A Super reviewing employee radiation exposure (int e data to determine:	visor to the Plan ernal and externa	t Man 1) an	ager e d effl	very uent	6
	a. if ca	there are any upward trends developing in tegories of workers, types of operations, o	personnel exposur r in effluent rel	e for eases	ident ;	ifia	ble
	b. if an	<sup>e</sup> exposures and releases can be lowered in a d	ccordance with th	e ALA	RA com	mitm	ent;
	c. if ma	equipment for effluent and exposure contro intained, and inspected.	l is being proper	ly us	ed,		
13.	The li Condit	censee shall leak test sealed sources in ac ion For Leak Testing Sealed Byproduct Mater	cordance with the ial Sources."	encl	osed "	Lice	nse
14.	Releas be in Equipm Byprod	e of equipment and material from the plant accordance with the enclosed "Guidelines fo ent Prior to Release for Unrestricted Use o luct, Source, or Special Nuclear Material,"	site or to clean or Decontamination or Termination of dated August 1987	areas of F Licen	onsit acilit ses fo	e sh ies or	all and
15.	Pursua materi	nt to 10 CFR 20.302, the licensee is author als containing uranium enriched in U-235 an	vized to treat was nd/or source mater	te an ial b	d scra y inci	inera	tion.
16.	Within NRC a enviro materi alpha-	60 days of the date of this license renewa description of a proposed monitoring progra onmental effects of radioactivity on spent l al and to determine the environmental effect contaminated material.	al, the licensee s am to determine th imestone rock use its of outdoor sto	hall le qua ed as orage	submit ntity onsite of the	to and fil	the 1
17.	The li beta c backgr	censee shall survey spent limestone rock di contamination. Rock with beta contamination round of fresh rock shall not be used for la	ischarge from each which exceeds fi andfill.	hHF s ive ti	crubbe mes tł	er fo ne	r
18.	Within a plan rock.	60 days of the date of this license renewa , including schedule, for the disposal of a	al, the licensee s alpha-contaminated	shall 1 spen	submit It lime	t to eston	NMSS Ie
19.	The li residu 250 pi of soi determ	censee shall decontaminate the two evaporat al contamination in each pond does not exce cocuries of insoluble uranium or 100 picocu 1. The Tc-99 concentrations in a composite nined.	tion ponds such t eed the appropriat uries of soluble o sample for each	hat th te lin uranit pond	ne aven nit of m per shall	rage eith dry be	er gram
		<u>.</u>					
		- -					
	THE PART PART PART		101 101 101 101 101 101 101 101 101 101	10/ 102 102		UTUTU	avevever

÷

NRC Form 374A	U.S. NUCLEAR REGU	LATORY COMMISSION	1	PACE	3	05	5	DACES
(5-84)			License num.					_FAGC3_
			SNM-33 Ame	ndment	No.	18		
MATI	ERIALS LICENSE		Docket or Referen	ce number				
SUPPL	EMENTARY SHEET		70-36					
			70-50					
						J	AN 2 9	1991
	<u></u>		· · · · · ·	<u></u>				
<ul> <li>20. a. If the radio quarter, the Commission a corrective a If the parameter submitted wan estimate</li> <li>b. In the even consecutive 40 CFR 190. so as to complete the consecutive so as to complete th</li></ul>	Dactivity in plan licensee shall, report which id actions to be tak neters important ithin 30 days whi of the resultant t that the calcul 12-month period 10, the licensee mply with 40 CFR	t gaseous effl within 30 day lentifies the c en by the lic to a dose asse ch describes t change in dos ated dose to a is about to ex shall take imm 190.10. As pr	uents exceed s, prepare an ause for exce ensee to red ssment changes he changes in e commitment ny member of ceed the lim ediate steps ovided in 40	s 150 µ nd subm eeding uce the e, a re n <sub>1</sub> param the pu its spe to rec CFR 19	ublic bit f the port neter ublic cif duce	per ca to the limit lease t shal rs and c in a ied in emiss l, the	lenda and rates be incl	r the udes
licensee may the requiren the licensed limits spec	<pre>/ petition the Nu nents of 40 CFR 1 e shall submit th ified in 40 CFR 1</pre>	lolear Regulato 190.10. If a p ne request at 1 190.10.	ry Commissio etition for east 90 days	n for a a varia prior	a va ance to	riance is an exceed	from ticip ling t	ated the
21. The licensee sha Contingency Plan licensee shall a Plan as necessar Radiological Con Plan without pr licensee may ma Commission appro Plan. The licen Industrial and I Washington, DC after the chang	all maintain and n submitted to th also maintain imp ry to implement t ntingency Plan th ior Commission ap ke changes to his oval if the chang nsee shall furnis Medical Nuclear S 20555, a report c e is made.	execute the re le Commission b lementing proc he Plan. The lat would decre proval as evid Radiological jes do not decr h the Chief, F safety, NMSS, U containing a de	sponse measu y letter dat edures for h licensee sha ase the resp enced by a l Contingency ease the res uel Cycle Sa . S. Nuclear scription of	res of ed Deco is Rad is Rad is Rad onse ef icense Plan w ponse ef fety Bi Regula each o	his mbe iolog no ffec ame itho effec ranc ator chan	Radio r 28, gical chang tivene ndment ut pri ctiven h, Div y Comm ge wit	logic 1987. Conti je in ess of or or ission issic chin 6	al The ingency his the the of the of the of on, is month
22. At the end of the site in accordant to the letter da released to unre available for da incorporated as	he plant life, th nce with the gene ated January 12, estricted use. T ecommissioning ir condition of the	e licensee sha ral decommissi 1979, so that the financial c the letter da license.	<pre>11 decontami oning plan s these facili ommitment to ted March 8,</pre>	nate tl ubmitto ties an assuro 1979,	ne fi ed i nd g e th is	acilit n the rounds at fur hereby	cies a enclo can ids wi	and osure be ill be
23. The licensee sha areas, as descr authorized by t	all continue the ibed in the lette he Commission.	soil sampling er dated Februa	program for ry 29, 1984,	the sp until	ent dis	limest contir	cone f nuance	fill e is
24. The monitoring	program for the s	pent limestone	shall inclu	de:				
a. Continuous uncovered s may be comp The lower l	air sampling at t pent limestone pi osited and analyz imit of detectior	the center of, iles for a mini red for uranium shall be 10	and approxim mum 2-year p <sub>16</sub> activity o µCi/ml, o	ately : eriod. n a qua r	l me Th arte	ter ab e week rly ba	oove, dy sa sis.	the amples
<sup>1</sup> The report or personance of the second secon	tition should be uards, with a cop	submitted to t by to the Regic	he Director, nal Administ	Offic rator,	e of Reg	Nucle ion Il	ear Ma [I.	aterial

- 20. a. If the radioactivity in plant gaseous effluents exceeds 150 µCi per calendar quarter, the licensee shall, within 30 days, prepare and submit to the Commission a report which identifies the cause for exceeding the limit and the corrective actions to be taken by the licensee to reduce the release rates. If the parameters important to a dose assessment change, a report shall be submitted within 30 days which describes the changes in parameters and includes an estimate of the resultant change in dose commitment.
  - b. In the event that the calculated dose to any member of the public in any consecutive 12-month period is about to exceed the limits specified in 40 CFR 190.10, the licensee shall take immediate steps to reduce emissions so as to comply with 40 CFR 190.10. As provided in 40 CFR 190.11, the licensee may petition the Nuclear Regulatory Commission for a variance from the requirements of 40 CFR 190.10. If a petition for a variance is anticipated the licensee shall submit the request at least 90 days prior to exceeding the limits specified in 40 CFR 190.10.
- 21. The licensee shall maintain and execute the response measures of his Radiological Contingency Plan submitted to the Commission by letter dated December 28, 1987. The licensee shall also maintain implementing procedures for his Radiological Contingency Plan as necessary to implement the Plan. The licensee shall make no change in his Radiological Contingency Plan that would decrease the response effectiveness of the Plan without prior Commission approval as evidenced by a license amendment. The licensee may make changes to his Radiological Contingency Plan without prior Commission approval if the changes do not decrease the response effectiveness of the Plan. The licensee shall furnish the Chief, Fuel Cycle Safety Branch, Division of Industrial and Medical Nuclear Safety, NMSS, U. S. Nuclear Regulatory Commission, Washington, DC 20555, a report containing a description of each change within 6 months after the change is made.
- 22. At the end of the plant life, the licensee shall decontaminate the facilities and site in accordance with the general decommissioning plan submitted in the enclosure to the letter dated January 12, 1979, so that these facilities and grounds can be released to unrestricted use. The financial commitment to assure that funds will be available for decommissioning in the letter dated March 8, 1979, is hereby incorporated as condition of the license.
- 23. The licensee shall continue the soil sampling program for the spent limestone fill areas, as described in the letter dated February 29, 1984, until discontinuance is authorized by the Commission.
- 24. The monitoring program for the spent limestone shall include:
  - Continuous air sampling at the center of, and approximately 1 meter above, the a. uncovered spent limestone piles for a minimum 2-year period. The weekly samples may be composited and analyzed for uranium<sub>16</sub> activity on a quarterly basis. The lower limit of detection shall be 10 µCi/ml, or
- The report or petition should be submitted to the Director, Office of Nuclear Material Safety and Safeguards, with a copy to the Regional Administrator, Region III.

NRC F	form 37	74A		U.:	S. NUCI	LEAR R	EGULA	TORY	COMMIS	SION			940	-	4	OF	5	BACE
(5-84)										ŀ	License n	un .	PAGE			01		FAGE
					C 1 1/		-				SNM-3	33 Am	endmer	nt N	<b>n</b> .	18		
			MAI	EKIA		CENSE	3			ł	Docket o	Refere	nce numb	er	<u> </u>			
			SUPP	LEMEN	TARY	SHEET					70-36	5.						
										ł	10 50							
										1						JAN	29	1991
								<u> </u>		L								1991.
	b.	Measur to con analyt	ement ductir ical p	of th g suc rogra	e ura h a p m to	anium progra the N	acti am, t NRC f	vity he li or ap	on th cense prova	e su e sha 1.	rface all su	of th bmit	ne spe the s	nt 1 amp]	ime ing	stone and	e. P	rior
25.	Proc	essing	of UF	6 <sup>in</sup>	10-to	on cyl	linde	rs is	not	auth	orized	•						
26.	The	10-ton	UF <sub>6</sub> c	ylind	lers s	shall	be e	quipp	ed wi	th v	alve p	rotec	tors.					
27.	The slop stor	concre ed or age ar	te pac gradec ea.	l for so t	stora hat a	nge of any st	f UF oiHe	cyllj d`com	nders busti	Fand ble-	the s flungs	urrol woul	unding d not	are be	a s con	hall finec	be I to	the
28.	No c	ombust	ibles	shall	be	vore	d on '	the c	oncre	te p	ad.,		Ò_					
29.	A CO	2 <sup>fire</sup>	extir	guish	er sh	i ffør	e re	adily	' avai	labl	e near	the	stora	ge p	ad.			
30.	In a Marc be e	dditio h 30, ither	n to t 1987, sealec	he co UF <sub>0</sub> ~e	wirol ylinc seale	ls in lers v ed ove	sect which erper	ion I àre ks, o	of t in tr n'in	he e ansp seal	nclosu ontoat et vet	d cor icles	o the ntaini 5.	lett ng U C	er <sup>IF</sup> 6	datec heels	l sha	11
31.	Notw a un the	ithsta it or licens	nding an arr e.	the s	tatem ) unit	ient i Systia - Jy - Jy - A	in Se altri	ot ipn	4.2.	3 01	the a Unies	pplic s.spc	ation cific	रि सो। र	ne k ⁄au	-effe Ithori	ectiv ized	e of by
32.	Nucl Sect mode	ear cr ion 2. ration	itical 7, Par and r	ity s t I o eflec	atety the tion	eval appl of in	Nigti Vicat ndivi	ion dual/	sbailt sate	be be	y the based	lice on as of an	ensee sumpt	in a ions	icco of	ordanc opti	e wi mum	th
33.	Nucl by a an i Spec	ear cr Nucle ndivid ialist	itical ar Cri ual ha	ity s tical ving,	afety ity S as a	Veyai Specia a mini	luati alist imu <b>s</b>	ons i shal the	nvolv l be quali	ing inde fica	k-effe penden tigns	ctive by 1 of a	calc review Nucle	ulat ed a ar C	ion Ind Crit	s per appro icali	rform oved ity	ed by
34.	For aggl the of t	uraniu omerat pellet he app	m enri ion/gr press licati	ched anula ing o on.	to mo tion perat	pre th proce tion 1	han 4 ess, to sa	.l w/ each fe ma	'o U-2 agglo Iss un	35, mera its	the li ted po as spe	cense wder cifie	ee sha stora ed in	11 1 ge 1 Tabl	imi loca le 4	t the tion, .2.4,	e , and , Par	t I
35.	Dele	ted.																
					•													

•

3 .

NRC (5-84					<u></u>		
(5-84	C Form 374A U.S.	NUCLEAR REGULATORY COMMI		PAGE	5 OF	5	PAGES
-	4}		License nun	<u></u>	· · ·		
		LICENCE	SNM-33 A	Mendment N	o. 18		
	MATERIALS	LICENSE	Docket or Refe	trence number			,
	SUPPLEMENT	ARY SHEET	70-36				
			10-50 .				<u> </u>
					IV	N 9 0	1001
					JA	M L J	1331
36.	Deleted.						
37	Deleted						
57.	bereteu.						
30	Dolated						
JU.	Jeleveu.						
20	At all times the line.	neon chall limit moder	ating matanial	(colutions	and now	dene	
JJ.	and all climes, the licer	isce shall limit mouerd	then the Freed		anu puw	nuers) of	>
	except poreformer and	TUDTICALL, TO NOT MOTE	Lian LWU 5-ga	iion paris	оп еасп	01	
	the second and third f	100L2 01 RAILEVIE	5611.				
		1 2.					
		5.0	~々	<u>x</u>			
		N NY NO	i i	<u>^</u>			
		$\sim$	٠	$\mathbf{O}$			
	•						
	· •	2	2	Ζ			
	4		135				
	5	the second se	S. I BE	- C.			
			122	$\sim$			
	4						
		a state and		. 7			
				· 5			
	<u>ب</u>		THE ST.				
		538)A 24	And Internet	: 5			
	$\sim$		R II'				
			LUCA-	CA I			
	1		K JA				
		in Li GIIII	S 311	S.			
		A GUN	Nº 1	$\sim$			
			۰. ۱	U			
		·/)	7	•			
			· · · · · · · · · · · · · · · · · · ·				
				:			
		FOR THE NUCLEA	A RECHI ATORY C	OMMISSION			
		FUR THE NULLEA	W VEGORALOVI C	OUNITODIOU			
	. 1		•				
	10101		(AUH				
	116011						
	1/20/1.			appev			
Dat	te:	Ву:	Charles J. Hau	igniney			
Dat	te:	By: Division	<u>Charles J. Hau</u> n of Industrial	and			
Dat	te:	By: Division Medica	<u>Charles J. Hau</u> of Industrial al Nuclear Safe	and ty, NMSS			
Dat	te:	By: Division Medica Washingt	Charles J. Hau of Industrial Al Nuclear Safe ton, DC 20555	and ty, NMSS			
Dat ク	te:	By: Division Medica Washingt	Charles J. Hau n of Industrial al Nuclear Safe ton, DC 20555	and ety, NMSS			
Dat ク	te: $\frac{1}{2011}$	By: Division Medica Washingt	Charles J. Hau n of Industrial al Nuclear Safe ton, DC 20555	and ety, NMSS			
)at	te: $\frac{1}{2011}$	By: Division Medica Washingt	Charles J. Hau n of Industrial al Nuclear Safe ton, DC 20555	and ety, NMSS			

·

ŝ