Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
Energy Compensation Sources for Well Logging and Other Regulatory Clarifications – Part 39 (65 FR 20337; April 17, 2000) RATS ID 2000-1 Effective May 17, 2000							
39.2	Definitions			Section 39.2 is amended by adding definitions, energy compensation source and tritium neutron generator target source to read as follows:			
		802. W.3	B	Energy compensation source (ECS) means a small sealed source, with an activity not exceeding 3.7 MBq [100 microcuries], used within a logging tool, or other tool components, to provide a reference standard to maintain the tool's calibration when in use. * * * * *	Yes	No	uCi is used in lieu of writing out microcuries megabecqurels is written out instead of using the SI unit MBq. These are essentially identical. Therefore, no comment is generated.
			B	Tritium neutron generator target source means a tritium source used within a neutron generator tube to produce neutrons for use in well logging applications. * * * * *	Yes	No	The word, "well logging" is hyphenated. These are essentially identical. Therefore, no comment is generated.
39.15	Agreement with well owner or operator		C	Section 39.15 is amended by revising paragraph (a)(5)(ii) and the introductory text of paragraph (a)(5)(iii) to read as follows: (a) * * *			

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
		801.W. 501(c) (2)(ii) (a)		(5) * * * (ii) A means to prevent inadvertent intrusion on the source, unless the source is not accessible to any subsequent drilling operations; and	Yes	No	MS chose to remain with the existing language: "the setting of a whipstock or other deflection device," The MS language is more restrictive than NRC regulation but is allowed because it is Category C. MS states that exemptions to these requirements would be considered on a case by case basis to allow the staff to review and discuss such exemptions with the licensee and other state agencies to ensure that the public and the environment is protected. (Submittal letter to Josephine Piccone from Robert Goff, 1/23/03, ML 030280365). Therefore, no comment is necessary.
		801.W. 501(d)		(iii) A permanent identification plaque, constructed of long lasting material such as stainless steel, brass, bronze, or monel, must be mounted at the surface of the well, unless the mounting of the plaque is not practical. The size of the plaque must be at least 17 cm [7 inches] square and 3 mm [\1/8\-inch] thick. The plaque must contain-- * * * * *	Yes	No	The word, "identification," is omitted. Otherwise the wording is identifical. The wording is almost identical. Therefore, no comment is generated.
39.35	Leak testing of		C	Section 39.35 is amended by			

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
	sealed sources			revising paragraphs (b), (c), (d)(1), (e)(1), (e)(4) and (e)(5) to read as follows:			
		801.W. 105(b)		* * * * * (b) Method of testing. The wipe of a sealed source must be performed using a leak test kit or method approved by the Commission or an Agreement State. The wipe sample must be taken from the nearest accessible point to the sealed source where contamination might accumulate. The wipe sample must be analyzed for radioactive contamination. The analysis must be capable of detecting the presence -of 185 Bq [0.005 microcuries] of radioactive material on the test sample and must be performed by a person approved by the Commission or an Agreement State to perform the analysis.	No	No	No comment.
		801.W. 105(c)		(c) Test frequency. (1) Each sealed source (except an energy compensation source (ECS)) must be tested at intervals not to exceed 6 months. In the absence of a certificate from a transferor that a test has been made within the 6 months before the transfer, the sealed source may not be used until tested. (2) Each ECS that is not exempt	No	No	No comment.

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
		801.W 105(d)		from testing in accordance with paragraph (e) of this section must be tested at intervals not to exceed 3 years. In the absence of a certificate from a transferor that a test has been made within the 3 years before the transfer, the ECS may not be used until tested. (d) Removal of leaking source from service. (1) If the test conducted pursuant to paragraphs (a) and (b) of this section reveals the presence of 185 Bq [0.005 microcuries] or more of removable radioactive material, the licensee shall remove the sealed source from service immediately and have it decontaminated, repaired, or disposed of by an NRC or Agreement State licensee that is authorized to perform these functions. The licensee shall check the equipment associated with the leaking source for radioactive contamination and, if contaminated, have it decontaminated or disposed of by an NRC or Agreement State licensee that is authorized to perform these functions.	No	No	No comment.
		801.W. 105(e)		* * * * * (e) * * * (1) Hydrogen-3 (tritium) sources; * * * * * (4) Sources of beta- or gamma-emitting radioactive	Yes	No	uCi is used in lieu of writing out microcuries megabecqurels is written out instead of using the SI unit

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				material with an activity of 3.7 MBq [100 microcuries] or less; and (5) Sources of alpha- or neutron-emitting radioactive material with an activity of 0.37 MBq [10 microcuries] or less.			MBq. These are essentially identical. Therefore, no comment is generated.
39.41	Design and performance criteria for sources	801.W.108 (a)	B	Section 39.41 is revised to read as follows: (a) A licensee may use a sealed source for use in well logging applications if -- (1) The sealed source is doubly encapsulated; (2) The sealed source contains licensed material whose chemical and physical forms are as insoluble and nondispersible as practical; and (3) Meets the requirements of paragraph (b), (c), or (d) of this section.	Yes No	No No	The title adds the words, "Used in Downhole Operations". These are essentially identical. Therefore, no comment is generated for the title. No comment for (a).
		801.W.108(b)		(b) For a sealed source manufactured on or before July 14, 1989, a licensee may use the sealed source, for use in well logging applications if it meets the requirements of USASI N5.10-1968, ''Classification of Sealed Radioactive Sources,'' or the requirements in paragraph (c) or (d) of this section.	No	No	No comment for (b).
		801.W.108(c)		(c) For a sealed source manufactured after July 14, 1989, a licensee may use the sealed	No	No	No comment for (c).

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
		801.W. 108(d)		source, for use in well logging applications if it meets the oil-well logging requirements of ANSI/HPS N43.6-1997, ‘‘Sealed Radioactive Sources--Classification.” (d) For a sealed source manufactured after July 14, 1989, a licensee may use the sealed source, for use in well logging applications, if-- (1) The sealed source’s prototype has been tested and found to maintain its integrity after each of the following tests: (i) Temperature. The test source must be held at -40 deg. C for 20 minutes, 600 deg. C for 1 hour, and then be subject to a thermal shock test with a temperature drop from 600 deg. C to 20 deg. C within 15 seconds. (ii) Impact test. A 5 kg steel hammer, 2.5 cm in diameter, must be dropped from a height of 1 m onto the test source. (iii) Vibration test. The test source must be subject to a vibration from 25 Hz to 500 Hz at 5 g amplitude for 30 minutes. (iv) Puncture test. A 1 gram hammer and pin, 0.3 cm pin diameter, must be dropped from a height of 1 m onto the test source. (v) Pressure test. The test source must be subject to an external pressure of 1.695×10^7	Yes	No	(1) was included in the introductory paragraph (d). This is an editorial difference. Otherwise the wording is identical. Therefore, no comment for (d).

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				pascals [24,600 pounds per square inch absolute].			
		801.W. 108(e)		(e) The requirements in paragraphs (a), (b), (c), and (d) of this section do not apply to sealed sources that contain licensed material in gaseous form.	No	No	No comment for (e).
		801.W. 108(f)		(f) The requirements in paragraphs (a), (b), (c), and (d) of this section do not apply to energy compensation sources (ECS). ECSs must be registered with the Commission under Sec. 32.210 of this chapter or with an Agreement State.	Yes	No	Instead of the wording in 10 CFR 39.41 (f), "...must be **registered** with the Commission under Sec. 32.210 of this chapter or with an Agreement State." the State uses "...must be **evaluated** in accordance with 10 CFR 32.210 or equivalent Agreement State regulations." The act of registering consists of all the steps described in 32.210, only one of which is a device evaluation. In omitting the word "registered" the State is omitting the other requirements of 32.210. The State needs to replace the word "evaluated" with "registered" to achieve compatibility. **COMMENT GENERATED**

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
39.49	Uranium sinker bars	801.W. 306	C	Section 39.49 is revised to read as follows: The licensee may use a uranium sinker bar in well logging applications only if it is legibly impressed with the words ‘‘CAUTION--RADIOACTIVE-DEPLETED URANIUM’’ and ‘‘NOTIFY CIVIL AUTHORITIES (or COMPANY NAME) IF FOUND.’’	Yes	No	The CFR uses the word, “applications” whereas the MS reg uses “operations.” In this context, the two words are the same. Therefore, there is no comment.
39.53	Energy compensation source	801.W. 307	C	Section 39.53 is added to read as follows: The licensee may use an energy compensation source (ECS) which is contained within a logging tool, or other tool components, only if the ECS contains quantities of licensed material not exceeding 3.7 MBq [100 microcuries]. (a) For well logging applications with a surface casing for protecting fresh water aquifers, use of the ECS is only subject to the requirements of Secs. 39.35, 39.37 and 39.39. (b) For well logging applications without a surface casing for protecting fresh water aquifers, use of the ECS is only subject to the requirements of Secs. 39.15, 39.35, 39.37, 39.39, 39.51, and 39.77.	Yes	No	uCi is used in lieu of writing out microcuries megabecqurels is written out instead of using the SI unit MBq. These are essentially identical. Therefore, no comment is generated.

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
39.55	Tritium neutron generator target source	801.W. 308	C	Section 39.55 is added to read as follows: (a) Use of a tritium neutron generator target source, containing quantities not exceeding 1,110 MBq [30 curies] and in a well with a surface casing to protect fresh water aquifers, is subject to the requirements of this part except Secs. 39.15, 39.41, and 39.77. (b) Use of a tritium neutron generator target source, containing quantities exceeding 1,110 MBq [30 curies] or in a well without a surface casing to protect fresh water aquifers, is subject to the requirements of this part except Sec. 39.41.	Yes	No	The NRC regulation is incorrect in (a) and (b). MBq should be GBq. The MS reg spells out GBq as gigabecquerels (30 Ci). We should thank MS for pointing out the error in NRC regs. In (a), Secs. 39.15, 39.41 and 39.77 are 801.W.4,.108 and .501 respectively. In (b), Sec. 39.41 is .108. These are correct. Therefore, no comment is necessary. Note: An All Agreement States Letter to be sent will note the error after IMNS publishes a correction in the Federal Register.
39.77	Notification of incidents and lost sources; abandonment procedures for irretrievable sources	801.W. 501(c) (1)	C- paragraphs (a), (c) & (d) D- paragraph (b)	Section 39.77 is amended by revising paragraph (c)(1), redesignating paragraphs (d)(9) and (d)(10) as paragraphs (d)(10) and (d)(11), and adding a new paragraph (d)(9) to read as follows: * * * * * (c) * * * (1) Notify the appropriate NRC Regional Office by telephone of the circumstances that resulted in the inability to retrieve the source	Yes	No	"NRC Regional Office" is substituted by "Agency."

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
		(i) (ii) (c)(3) (ix)		and-- (i) Obtain NRC approval to implement abandonment procedures; or (ii) That the licensee implemented abandonment before receiving NRC approval because the licensee believed there was an immediate threat to public health and safety; and * * * * * (d) * * * (9) The immediate threat to public health and safety justification for implementing abandonment if prior NRC approval was not obtained in accordance with paragraph (c)(1)(ii) of this section; * * * * *			"NRC" becomes "Agency" "NRC" becomes "Agency" (C)(1)(ii) becomes 801.W.501(c)(1)(ii). Because these changes are appropriate, there is no comment.

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
New Dosimetry Technology – Parts 34, 36, 39 (65 FR 63749, October 24, 2000; 66 FR 1573, January 9, 2001) RATS ID 2000-2 Effective January 8, 2001							
34.47	Personnel monitoring	801.E.20	C	In Sec. 34.47, the introductory text of paragraph (a), and paragraphs (a)(2), (a)(3), (a)(4), (d), (e), and (f) are revised to read as follows: (a) The licensee may not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operations, each individual wears, on the trunk of the body, a direct reading dosimeter, an operating alarm ratemeter, and a personnel dosimeter that is processed and evaluated by an accredited National Voluntary Laboratory Accreditation Program (NVLAP) processor. At permanent radiography installations where other appropriate alarming or warning devices are in routine use, the wearing of an alarming ratemeter is not required. * * * * * (2) Each personnel dosimeter must be assigned to and worn only by one individual. (3) Film badges must be replaced at periods not to exceed one month and other personnel dosimeters processed and evaluated by an	N		

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
34.47 (cont'd)				accredited NVLAP processor must be replaced at periods not to exceed three months. (4) After replacement, each personnel dosimeter must be processed as soon as possible .* * * * * (d) If an individual's pocket chamber is found to be off-scale, or if his or her electronic personal dosimeter reads greater than 2 millisieverts (200 millirems), and the possibility of radiation exposure cannot be ruled out as the cause, the individual's personnel dosimeter must be sent for processing within 24 hours. In addition, the individual may not resume work associated with licensed material use until a determination of the individual's radiation exposure has been made. This determination must be made by the RSO or the RSO's designee. The results of this determination must be included in the records maintained in accordance with Sec. 34.83. (e) If the personnel dosimeter that is required by paragraph (a) of this section is lost or damaged, the worker shall cease work immediately until a replacement personnel dosimeter meeting the requirements in paragraph (a) is provided and the exposure is calculated for the time period from issuance to loss or damage of the personnel dosimeter.			

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				The results of the calculated exposure and the time period for which the personnel dosimeter was lost or damaged must be included in the records maintained in accordance with Sec. 34.83. (f) Dosimetry reports received from the accredited NVLAP personnel dosimeter processor must be retained in accordance with Sec. 34.83. * * * * *			
34.83	Records of personnel monitoring procedures	801.E.24	C	* * * * * (c) Personnel dosimeter results received from the accredited NVLAP processor until the Commission terminates the license. (d) Records of estimates of exposures as a result of: off-scale personal direct reading dosimeters, or lost or damaged personnel dosimeters until the Commission terminates the lice	N		
36.55	Personnel monitoring	N/A	D	In Sec. 36.55, paragraph (a) is revised to read as follows: (a) Irradiator operators shall wear a personnel dosimeter that is processed and evaluated by an accredited National Voluntary Laboratory Accreditation Program (NVLAP) processor while operating a panoramic rradiator or while in the area around the pool of an	N/A	N/A	N/A

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				underwater irradiator. The personnel dosimeter processor must be accredited for high energy photons in the normal and accident dose ranges (see 10 CFR 20.1501(c)). Each personnel dosimeter must be assigned to and worn by only one individual. Film badges must be processed at least monthly, and other personnel dosimeters must be processed at least quarterly. * * * * *			
36.81	Records and retention periods.	N/A	D	In Sec. 36.81, paragraph (e) is revised to read as follows: * * * * * (e) Evaluations of personnel dosimeters required by Sec. 36.55 until the Commission terminates the license. * * * * *	N/A	N/A	N/A
39.65	Personnel monitoring	801.W.203 (a)	Category C for paragraph (a) and Category D for paragraph (c)	In Sec. 39.65, paragraphs (a) and (c) are revised to read as follows: (a) The licensee may not permit an individual to act as a logging supervisor or logging assistant unless that person wears, at all times during the handling of licensed radioactive materials, a personnel dosimeter that is processed and evaluated by an accredited National Voluntary Laboratory Accreditation Program (NVLAP) processor. Each personnel dosimeter must be	Yes	No	"The language difference does not omit any requirements and the essential objectives of this section are met. Because this paragraph is Category "C", there is no comment.

Change to Nrc Section	Title	State Section	Comparability Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				assigned to and worn by only one individual. Film badges must be replaced at least monthly and other personnel dosimeters replaced at least quarterly. After replacement, each personnel dosimeter must be promptly processed. * * * * * (c)The licensee shall retain records of personnel dosimeters required by paragraph (a) of this section and bioassay results for inspection until the Commission authorizes disposition of the records.			
			Para C is N/A Cat D		Para C is N/A		