NRC FORM 591M PART 1 U.S NUCLEAR REGULATORY COMMISSION (06-2010)								
10 CFR 2.201 SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION								
1. LICENSEE/LOCATIO	N INSPECTED:	6 Cretan	2. NRC/REGIONAL OFFICE					
Northstar Health System 1400 W. Ice Lako Rd. Iron River, mi 49935 REPORT NUMBER(S): 10-01			U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532					
3. DOCKET NUMBER(5 030- 1 3 9 4		4. LICENSEE NUMBER		5. DATE(S) OF INSP				
LICENSEE:         The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:         Image: the inspection findings, no violations were identified.       1. Based on the inspection findings, no violations were identified.         Image: the inspection (s) closed.       3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied         Image: Non-cited violation(s) were discussed involving the following requirement(s):         4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11								
Statement of Corrective Actions         I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.         Title       Printed Name       Signature       Date         LICENSEE'S       Date       Date								
REPRESENTATIVE								
Branch Chief	Ken Lambert		- Ken	Tabet	9/21/11			
	Tamara E. Bloor	mer	1250	bonce	10/14/1			

NRC FORM 591M PART 3 (10-2011)		Dookot Eilo Inf	U.S. NUCLEAR REGULATORY COMMISSION				
Docket File Information 10 CFR 2.201 SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION							
1. LICENSEE/LOCATION INSPECTED:			2. NRC/REGIONAL OFFICE	2. NRC/REGIONAL OFFICE			
Northstar Health System d/b/a/ Iron County General Hospital 1400 West Ice Lake Road Iron River, MI REPORT NUMBER(S) 2011-001			Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352				
3. DOCKET NUMBER(S)		4. LICENSE NUMBER	(S)	5. DATE(S) OF INSPECTION			
030-13903		21-18486-01		09/21/2011			
6. INSPECTION PROCEDURES USED		7. INSPECTION FOCU	7. INSPECTION FOCUS AREAS				
87130		03.01-03.07	03.01-03.07				
	SUPP	LEMENTAL INSPECT	ION INFORMATION				
1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTAC	CT	4. TELEPHONE NUMBER			
2121	5	Sharon Dedo, RS	SO	(906) 265-6121			
<ul> <li>Main Office Ins</li> <li>Field Office Ins</li> <li>Temporary Job</li> </ul>	-	Next Inspection	n Date: 09/201	6			
PROGRAM SCOPE							

## This small community hospital employees one full time nuclear medicine technologist, who is also the radiation safety officer, and performs studies Monday thru Friday. The licensee was authorized for 35.100, and 200, and prepackaged kits. The licensee is not currently using prepackaged kits. The licensee performed approximately 10 studies per week including bone, HIDA, and cardiac. The licensee performed approximately 6 lung scans/ year using Xe-133, and whole body scans using iodine-123. The licensee used all unit doses from a local nuclear pharmacy since January 2011, previously licensee was using Mo-99/Tc-99m generators. The licensee received 70 mCi and 30 mCi of bulk Tc-99m for emergency studies daily. All waste was held for decay or returned to the nuclear pharmacy. A consulted provided semi-annual audits and performed instrument audits, leak tests and inventory, and annual accuracy tests of the dose calibrator.

## PERFORMANCE OBSERVATIONS

The inspector observed several diagnostic administrations of licensed material including dose preparation and disposal. Licensee staff discussed/demonstrated dose calibrator daily constancy checks, package receipt surveys, daily and weekly contamination surveys and wipes surveys, waste disposal, and quarterly linear tests, with no issues identified. Interviews of staff indicated an adequate knowledge of radiation safety procedures. The inspector reviewed records of negative pressure tests and calculated clearance time for the xenon-133 use room. The licensee's hot lab was located within the imaging suite, which was properly secured from unauthorized access during the inspection. The inspector noted that staff was wearing appropriate dosimetry. The inspector reviewed dosimetry records and noted the following whole body (WB) and extremity exposures were 238 mrem WB and 600 mrem extremity for 2011 to August 24; 210 mrem WB and 2310 mrem extremity for 2010; 138 mrem WB and 1950 mrem extremity for 2009; and 136 mrem WB and 1320 mrem extremity for 2008.

Independent measurement taken within the imaging suite with a Ludlum Model 3403 survey meter coupled to a compensated Geiger-Mueller detector ranged between background and 0.05 millirem per hour. Background measurement was 0.02 millirem per hour. The survey meter was last calibrated on September 6, 2011.

No violations of regulatory requirements were identified.