



2841 DEBARR ROAD | SUITE 100 | ANCHORAGE, AK 99508 | P: 907.276.2400 | TOLL-FREE: 877.276.4655 | F: 907.276.4888

Jack E. Whitten, Chief

Nuclear Materials Safety Branch B

Arlington, TX 76011-4511

Division of Nuclear Materials Community Region IV/Nuclear Regulatory Community Communi

9 October 2014

Dear Mr. Whitten,

DNMS

License # 50-35068-01

We would like to add Noah Arvidson, MS and Bingqi Guo, PhD to our Gamma Knife License (# 50-35068-01) as Authorized Medical Physicists (AMP). Attached are the required FORMS 313A "AUTHORIZED MEDICAL PHYSICIST TRAINING AND PRECEPTOR ATTESTATION" and other required documentation

Noah Arvidson, MS:

- 1) Has a masters degree in Medical Physics from the University of Wisconsin (see copy of diploma attached)
- 2) Has completed four years of megavoltage calibration and quality assurance under the direction of Darwin Zellmer, PhD, RSO and AMD as his preceptor (see Form 313A attached)
- 3) Has completed one year of calibration and quality assurance on the Gamma Knife under the direction of Darwin Zellmer, PhD, RSO and AMD as his preceptor (see Form 313A attached)
- 4) Has completed factory authorized Gamma Knife training at Cleveland Clinic (See attached certificate)

Dr Bingqi Guo, PhD DABR:

- 1) Has a PhD from the University of Texas (see copy of diploma)
- 2) Is board certified by the American Board of Radiology (see attached copy of certification)
- 3) Has completed factory authorized Gamma Knife training at Cleveland Clinic (See attached certificate and preceptor statement form 313A)

We feel that the above described documentation satisfies requirement per 10 CFR 35.51 and request that Mr. Arvidson and Dr Guo be added to our NRC License #50-35068-01 in a timely manner as AMPs.

Sincerely,

Richard T. Chung, MD Medical Director

PUBLIC

☐ Immediate Release X Normal Release

NON-PUBLIC

□ A.3 Sensitive-Security Related

☐ A.7 Sensitive Internal Other:

Darwin L. Zellmer, PhD Radiation Safety Officer

D.L. Zellmer

M 5 8 5 1 2 3

RICHARD T. CHUNG, MD STEPHEN H. SETTLE, MD, PHD CAROL SWARTS, MD

Myc Date: 10-28-14

NRC FORM 313A (AMP)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE APPROVED BY OMB: NO. 3150-0120 EXPIRES: (05/31/2015) AND PRECEPTOR ATTESTATION [10 CFR 35.51] Name of Proposed Authorized Medical Physicist Noah Arvidson, MS Requested 35.400 Ophthalmic use of strontium-90 35.600 Teletherapy unit(s) Authorization(s) 35.600 Remote afterloader unit(s) √ 35.600 Gamma stereotactic radiosurgery unit(s) (check all that apply) PART I -- TRAINING AND EXPERIENCE (Select one of the three methods below) Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above. 1. Board Certification a. Provide a copy of the board certification. b. Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought. c. Skip to and complete Part II Preceptor Attestation. 2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above a. Go to the table in section 3.c. to document training for new device. b. Skip to and complete Part II Preceptor Attestation √ 3. Education, Training, and Experience for Proposed Authorized Medical Physicist a. Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university. Degree Major Field MS Medical Physics College or University University of Wisconsin b. Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services. Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of Darwin L. Zellmer, PhD, DABR, DABP who meets the requirements for an Authorized Medical Physicist. AND Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of Darwin L. Zellmer, PhD, DABR, DABP who meets the requirements for an Authorized Medical Physicist.

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued) If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*			
Medical Physics	Anchorage Radiation Therapy Center	Sept 2010 - Sept 2013	Sept 2013 - Sept 2014			
Performing sealed source leak tests and inventories		Sept 2013 - Sept 2014				
Performing decay corrections	Anchorage Radiation Therapy Center		Sept 2013 - Sept 2014			
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Anchorage Radiation Therapy Center		Sept 2013 - Sept 2014			
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)	Anchorage Radiation Therapy Center		Sept 2013 - Sept 2014			
Performing full calibration and periodic spot checks of remote afterloading unit(s)						
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)	Anchorage Radiation Therapy Center		Sept 2013 - Sept 2014			
Supervising Individual** License/Permit Number listing supervising individual as an authorized Medical Physicist						
Darwin L. Zellmer, PhD, DABR, DAB	NRC License number 50-350	68-01				
for the following types of use:						
Remote afterloader unit(s)	☐ Teletherapy unit(s)	ereotactic radi	osurgery unit(s)			
 Training and work experience must be c electrons with energies greater than or e 	onducted in clinical radiation facilities that provide high-energ qual to 1 million electron volts) and brachytherapy services.	y external beam t	nerapy (photons and			
* 1 year of Full-time medical physics traini	ng and 1 year of full time work experience cannot be concurr	ent.				
	t an authorized medical physicist, the licensee must submit ence requirements in 10 CFR 35.51 and 35.59 for the types of					

	3.	Education,	Training, an	d Experience	for Proposed	Authorized	Medical Physicis	st (continued)
--	----	------------	--------------	--------------	--------------	-------------------	------------------	----------------

C.	Describe training	provider and	dates of training	g for each type	e of use for which	authorization is sought.
----	-------------------	--------------	-------------------	-----------------	--------------------	--------------------------

Description of Training	Training Provider and Dates					
	Remote	Afterloader	Telethera	ру	Gamma Stereotactic Radiosurgery	
Hands-on device operation				Sept 2	2013 - 2014	
Safety procedures for the device use				Sept 2	2013 - 2014	
Clinical use of the device			Sept 2	2013 - 2014		
Treatment planning system operation				Sept 2013 - Sept 2014		
Supervising Individua f training is provided by Supervi- ndividual is necessary to docum this page.)	sing Medical Physicist, (If	more than one supervising rovide multiple copies of	License/Permit Numb Medical Physicist	er listing supervising	individual as an authorized	
Darwin L. Zellmer, F	PhD, DABR, DA	ВР	NRC License numbe	r 50-35068-01		
for the following types of use: Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)						
f Applicable:						
Authorization So	ought	Device	Training	Provided By	Dates of Training	
35.400 Ophthalmic of strontium-90	Use					

NRC FORM 313A (AMP) (05-2012) U.S. NUCLEAR REGULATORY COMMISSION							
	AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)						
		PART II - PRECEPT	OR ATTESTATIO	N			
Note:	individual as long	be completed by the individual's prece g as the preceptor provides, directs, a necessary to document experience,	or verifies training a	and experience required.	. If more than		
First S Check	ection one of the follow	wing:					
	1. Board Certif	ication					
	I attest that			completed the requirem	nents in		
	10 CFR 35.5	Name of Proposed Authorized Medical Physicis 51(a)(1) and (a)(2).					
	2. Education, T	O <u>Fraining, and Experience</u>	R				
		Noah Arvidson, MS	has satisfactorily	completed the 1-year of	f full-time		
		Name of Proposed Authorized Medical Physicis					
- -	training in me 35.51(b)(1).	edical physics and an additional year	of full-time work ex	rperience as required by	10 CFR		
		AN	ID				
	d Section ete the following	j:					
	✓ I attest that	Noah Arvidson, MS Name of Proposed Authorized Medical Physicis		he types of use for which	authorization		
		t include hands-on device operation, anning system.		clinical use, and the ope	eration of a		
		AN	ID				
Third S Comple	Section ete the following	ı:					
	✓ I attest that	Noah Arvidson, MS	has achieved a le	evel of competency suffic	cient to		
	function inde	Name of Proposed Authorized Medical Physicist pendently as an Authorized Medical		lowing:			
			35.600 Teletherapy				
				ereotactic radiosurgery unit((s)		
			=======				
	Section ete the following	AN for preceptor attestation and sign					
2999	✓ I meet the red	quirements in 10 CFR 35.51, or equiresicist for the following:		State requirements for Au	ıthorized		
	_		35.600 Teletherapy	unit/a)			
				reotactic radiosurgery unit(s)		
Name of I	Preceptor	Signature	00	Telephone Number	Date		
	Zellmer, PhD, DA	ABR, DABP	Umer	(907) 276-2400	12Sep2014		
	Permit Number/Faci	ility Name 5068-01 Anchorage Radiation Therapy (Cantar				
		coo of the horage radiation therapy (Citter				



THE CLEVELAND CLINIC GAMMA KNIFE CENTER

Noah Arvidson, MS

has completed the Gamma Knife[®] Perfexion™ Introductory Training Course August 19-23, 2013

Gene H. Barnett, MD

Director, Cleveland Clinic Gamma Knife Center

Gennady Neyman, PhD

Lead Gamma Knife Physicist, Cleveland Clinic Gamma Knife Center



Lilyana Angelov, MD

Program Co-Director, Cleveland Clinic

Gamma Knife Center

John Suh, MD

Associate Director, Cleveland Clinic

Gamma Knife Center

INVERSITY OF WISCONSIN-MADISON

The Board of Regents of the University of Wisconsin System, on the nomination of the faculty, has conferred upon

NOAH BARRETT ARVIDSON

The Degree of

MASTER OF SCIENCE

MEDICAL PHYSICS

Together with all honors, rights, and privileges belonging to that degree. In witness whereof, this diploma is granted.

Given at Madison, in the State of Wisconsin, this twentieth day of May, in the year two thousand and seven and of the University the one hundred fifty-seventh.

President, University of Wisconson System

Chancellor, University of Wisconsin-Madison

President of the Board of Regents

U.S. NUCLEAR REGULATORY COMMISSION NRC FORM 313A (AMP) **AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE** APPROVED BY OMB: NO. 3150-0120 EXPIRES: (05/31/2015) AND PRECEPTOR ATTESTATION [10 CFR 35.51] Name of Proposed Authorized Medical Physicist Bingqi Guo, PhD, DABR Requested 35.400 Ophthalmic use of strontium-90 35.600 Teletherapy unit(s) Authorization(s) 35.600 Remote afterloader unit(s) √ 35.600 Gamma stereotactic radiosurgery unit(s) (check all that apply) PART I -- TRAINING AND EXPERIENCE (Select one of the three methods below) Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above. √ 1. Board Certification a. Provide a copy of the board certification. b. Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought. c. Skip to and complete Part II Preceptor Attestation. 2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above a. Go to the table in section 3.c. to document training for new device. b. Skip to and complete Part II Preceptor Attestation 3. Education, Training, and Experience for Proposed Authorized Medical Physicist a. Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university. Degree Major Field College or University b. Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services. Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of who meets the requirements for an Authorized Medical Physicist. AND Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of who meets the requirements for

an Authorized Medical Physicist.

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued) If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*				
Medical Physics							
Performing sealed source leak tests and inventories							
Performing decay corrections							
Performing full calibration and periodic spot checks of external beam treatment unit(s)							
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)							
Performing full calibration and periodic spot checks of remote afterloading unit(s)							
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)							
Supervising Individual** License/Permit Number listing supervising individual as an authorized Medical Physicist							
		0404 6 6 6 6 6 6 6 6 6 6 6 6 6 6					
for the following types of use:							
Remote afterloader unit(s) Training and work experience must be celectrons with energies greater than or electrons.	onducted in clinical radiation facilities that provide high-energy		osurgery unit(s) nerapy (photons and				
	electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services. 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.						
If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.							

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates						
	Remot	e Afterloader		Gamr	na Knife	(Gamma Stereotactic Radiosurgery
Hands-on device operation			9	-30-14	l Descript 1:15-2:15 Neyman	Sep	2014 - 3 Oct 2014
Safety procedures for the device use			f	tands- Perfexion 0-1-14 ennady	9:45-10:45	29 Sep	2014 - 3 Oct 2014
Clinical use of the device			C	linical of Gam -30-14	Raciaeu- na Kriefe 3pm. 3;45pm Sam Chao	29 Sep	2014 - 3 Oct 2014
Treatment planning system operation			10	1-14	eatment 130-2:00 Jeyman Pri	29 Sep	2014 - 3 Oct 2014
Supervising Individual If training is provided by Supervising Medical Physicist, (If more than one supervising Individual is necessary to document supervised training, provide multiple copies of his page.) License/Permit Number listing supervising individual as an authorized Medical Physicist We have the following types of use:							
Teletherapy unit(s) ☐ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)							
f Applicable:							
Authorization So	ught	Device		Tra	ning Provided By		Dates of Training
35.400 Ophthalmic L of strontium-90	Jse						
. Skip to and comp							

NRC FORM 313A (AMP) (05-2012)	U.S. NUCLEAR REGULATORY COMMISSION								
AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)									
PART II – PRE	CEPTOR ATTESTATION								
individual as long as the preceptor provides, dir									
First Section									
Check one of the following:									
1. Board Certification									
✓ I attest that Bingqi Guo, PhD, DABR	has satisfactorily completed the requirements in								
Name of Proposed Authorized Medical F 10 CFR 35.51(a)(1) and (a)(2).	Physicist								
10 01 π 00:0 π απα (α)(Σ).	OR								
2. Education, Training, and Experience	OK								
I attest that	has satisfactorily completed the 1-year of full-time								
Name of Proposed Authorized Medical P									
training in medical physics and an additiona 35.51(b)(1).	I year of full-time work experience as required by 10 CFR								
	AND								
Second Section Complete the following:									
✓ I attest that Bingqi Guo, PhD, DABR	has training for the types of use for which authorization								
Name of Proposed Authorized Medical F	Physicist								
is sought that include hands-on device operative treatment planning system.	ation, safety procedures, clinical use, and the operation of a								
Third Section	AND								
Complete the following:									
✓ I attest that Bingqi Guo, PhD, DABR	has achieved a level of competency sufficient to								
Name of Proposed Authorized Medical F	•								
function independently as an Authorized Me	•								
35.400 Ophthalmic use of strontium-90	35.600 Teletherapy unit(s)								
35.600 Remote afterloader unit(s)	√ 35.600 Gamma stereotactic radiosurgery unit(s)								
	AND								
Fourth Section Complete the following for preceptor attestation and	I signature:								
✓ I meet the requirements in 10 CFR 35.51, or Medical Physicist for the following:	equivalent Agreement State requirements for Authorized								
35.400 Ophthalmic use of strontium-90	35.600 Teletherapy unit(s)								
35.600 Remote afterloader unit(s)	✓ 35.600 Gamma stereotactic radiosurgery unit(s)								
Name of Procentor									
Name of Preceptor Darwin L. Zellmer, PhD, DABR, DABMP	Telephone Number Date 06OCT 2014								
License/Permit Number/Facility Name	(907) 276-2400 06OCT 2014								
NRC Licwnse number 50-35068-01									

Graduate Achool of Biomedical Sciences Mealth Science Center at State Authoritie

Tinggi Cun

Be it Known that

basing successfully completed the prescribed course of study and bosing complied with all other requirements for graduation in this University, has been, by cuthority of the State of Texas, awarded the Dynes

Durtur of Philosophy

In Testimony Whereof, we, the Regents and Faculty of The University of Teas, have this day granted this Diploma bearing our signatures and the imposess of the wat of the Waiversily. Given at The University of Texas, this eighteenth lay of December, A. D., Too thousand and time and is entitled to all the rights and previleges appertaining to that Degree.

Ulminal. Hemich, my





Gamma Knife Center

October 3, 2014

Bingqi Guo, PhD Radiation Oncology Anchorage Radiation Thearapy 2844 Debarr Road, Suite 100 Anchorage, AK 99501 US

Dear Dr. Guo:

This is to confirm that during the September 29 – October 3, 2014 Gamma Knife Perfexion Course that you attended at the Cleveland Clinic, the course involved participants planning at least one single metastasis case, at least two multiple metastasis cases, at least one AVM case, at least one Pituitary tumor case, at least two Trigeminal Neuralgia cases, at least one Meningioma case and at least two Vestibular Schwannoma cases.

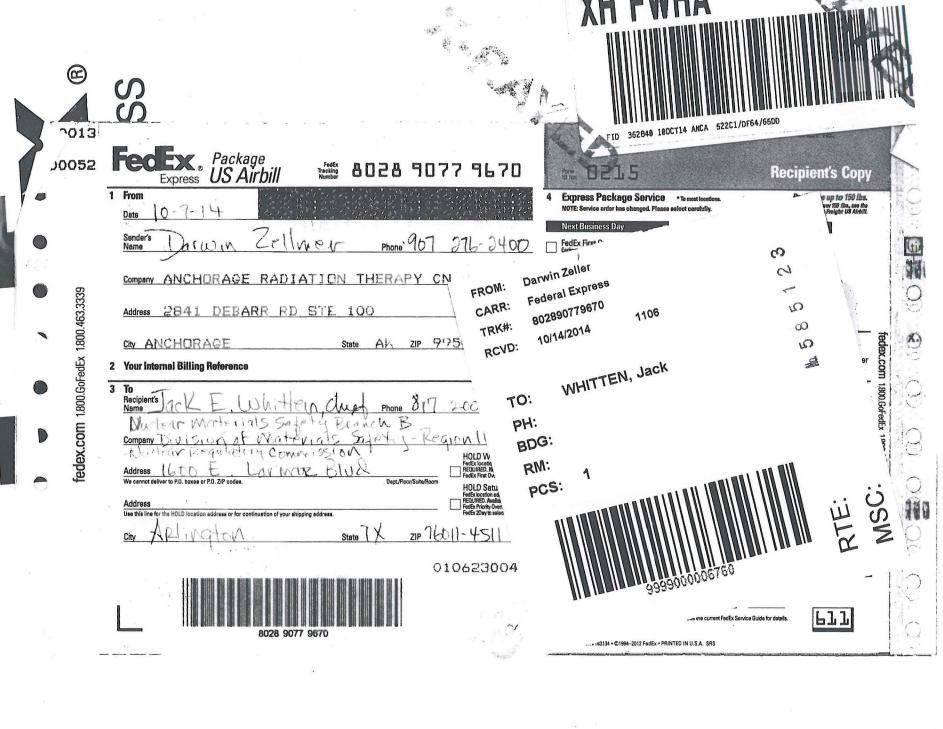
Sincerely,

Gene Barnett, MD

Lilyana Angelov, MD

Gennady Neyman, PhD

John Suh, MD



NRC FORM 532 (1-2012)



	putt story DA	ΓE					
	10/23	/2014					

NA	AME AND ADDRESS OF APPLICANT AND/OR LICENSEE	LICENSE NUMBER					
	Darwin Zellmer, Ph.D., Radiation Safety Officer	50-35068-01					
	Anchorage Radiation Oncology Management, Inc. dba Anchorage Radiation Therapy Center	MAIL CONTROL NUMBER					
	2841 Debarr Road, Suite 100	585123					
	Anchorage, Alaska 99508	LICENSING AND/OR TECHNICAL REVIEWER					
		СН					
	This is to acknowledge the receipt of your:						
	✓ LETTER and/or ✓ APPLICATION	DATED: 10/16/2014					
	The initial processing, which included an administrati	ve review, has been performed.					
	✓ AMENDMENT TERMINATION	NEW LICENSE RENEWAL					
	There were no administrative omissions identified during our initial review.						
		This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.					
	Your application for a new NRC license did not inclu Please fill out NRC Form 531, located at the following						
	http://www.nrc.gov/reading-rm/do	c-collections/forms/nrc531.pdf					
	Send the completed NRC Form 531, by facsimile, to	o the following number: (301) 415-5387					
	A copy of your action has been emailed to our Licer our Headquarters office in Rockville, MD. You will be involved.						
involved. Your application has been assigned the above listed MAIL CONTROL NUMBER. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:							

Region IV U. S. Nuclear Regulatory Commission DNMS/NMSB - B 1600 E. Lamar Boulevard Arlington, TX 76011-4511 (817) 200-1103 or (817) 200-1140

NRC FORM 532 19/23/14 (1-2012)

Accounts Receivable/Payal and Regional Licensing Branch		Program Code: 02310 Status Code: Pending Ar Fee Category: 7A Exp. Date: Fee Comments: Decom Fin Assur Reqd:	
License Fee Works	heet - License Fe	ee Transmittal	GOGGERMAN
1. APPLICATION ATTACHED Applicant/Licensee: Anci Received Date: 10/1 Docket Number: 3038 Mail Control Number: 5851 License Number: 50-3 Action Type: Ame	4/2014 3646	/ Management, Inc., dba Anchorag	e Radiation Therapy Ctr.
2. FEE ATTACHED Amount: Check No.:			
	Signed:	I L'Heie	
B. LICENSE FEE MANAGEMEI		milestone 03 is entered / /)
Fee Category and Amount:			
Correct Fee Paid. Application Amendment:	n may be processed for:		
Renewal:			
License:			
3. OTHER			
,	Signed:		_
	Date:		

[FOR ARPB USE]

BETWEEN: