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## ATTACHMENT 3 Pre-Dive Checklist Page 1 of 1

Page 1 of 1	\
(USED FOR SUBSEQUENT DIVES AFTER CREW'S INITIAL BRIEF. MAY BE PERFORMED IN AN	
PRE-DIVE CHECKLIST. (complete before each dive)	Initial - N/A
<ol> <li>Complete a pre-job briefing (discussion to include dive area boundaries, dose rate information and task(s)).</li> </ol>	MAL
2. Verify two underwater survey instruments are in calibration and source checked and are available.	MENA
3. Verify water clarity and underwater lighting adequate.	Inch
<ol> <li>Verify dive site survey is performed (historical survey available for initial dive) and methodology by RP Supervision approved.</li> </ol>	MCH
5. Verify dive suit is wet prior to diving.	AMER
6. Verify diver's suit(s) is surveyed and meets the requirements of step 4.3.5	ANGA
<ol> <li>Verify helmet dosimetry attached with wire/plastic ties, when applicable. Do not use material, such as plastic bags or tape, which could block diver's exhalation valve.</li> </ol>	Mich
8. Verify diver dosimetry in proper location (e.g., EDs, TLDs, Extremity, etc.).	1116A
9. Verify remote dosimetry equipment is operational.	NA
10. Verify two-way voice communications are available and operational.	INER
11. Verify approved method of visual contact is available.	116-11
12. Verify survey instrumentation used by diver is operable.	Mit
13. Verify in-leakage test of diver suit has been performed.	met
14. Verify that breathing air is monitored.	Mill
15. Evaluate the need for vacuuming and shielding.	ditely
16. Ensure all prerequisites of RP-AA-461 are met prior to dive operations.	AMER
17. Discuss immediate actions for each the following: CO alarm, High Rad alarm, CAM alarm, diver disorientation, diver signaled to leave, failure of underwater survey instrumentation, diver reaches pre-established dose limits, radiological aspects of dive can <u>NOT</u> be maintained or are suspect	MA
18. Discuss when the dive operations shall be suspended as per step 4.4.7.	11144
<ol> <li>Verify with Diver Supervisor that Ops Shift Supervision has been notified prior to start of dive evolutions.</li> </ol>	MER
20. Ensure appropriate controls are in place for dive evolutions in a high dose rate gradient area.	Mille
21. Ensure water are within limits. (<95° F unless approved by Dive Supervisor and prior to notification to RP/Safety)	MEA
22. Discuss approved dose levels with divers.	MR
23. When meeting the requirements of step 3.3.11, ensure a documented plan exists with the appropriate approvals when evaluating diver safety.	MA
03 <u>Mich Conden</u> Swinth 5/12/09 Divers Name (Print) Date <u>Much Hauting</u> RP Technigian (signed) Date	(B
Daskot Likt 5/12/09	1
RP Supervision Review (signed)	1

5/12/09 Mart offection Jwinth Gorden Divers Name (Print) RP Technician (signed)

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5/12/09 Date Iz 09 Date

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## ATTACHMENT 4 Dive Checklist Page 1 of 1

(Used for subsequent dives after cre	ew's initial brief. May be p	performed in any order)
PRE-DIVE CHECKLIST Date: <u>5/12/09</u> Diver's Name:	COMPLETE BEFORE <u>EAC</u> Gordon Suginth	H DIVE) RWP # <u>34</u>
Approved Dose Level: <u>2000</u> mrem	Current Exposure:	689_mrem
Maximum Stay Time://A	_ Minutes	

POST-DIVEICHECKLIST (complete after each dive)	Initial N/A
Dive Suit Survey Complete (including discrete radioactive particles)	MKA
Hose Off Diver	MILA
Decon Diver's Suit / Post Decon Survey documented	MEA
Electronic Dosimeter readings recorded	MER
Multiple Dosimetry TLDs stored	MA
Primary TLD returned to diver USING Primary TLD on Chest	MA
Exposure investigation required?	DYes DNo

 Electronic:Dosimeter/Exposure

 TimeIn//TimeOutt
 Zsay
 Head
 Left
 Chests
 Back
 IRIght
 Right
 Other

 in 13:35
 out /550
 (35)
 N/A
 <t

RP Technician (signed) Jack

RP Supervision Review (signed)

Date 12/09 Date

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ATTACHMENT 5 Diver Surveys In and Out of Water Page 1 of 1

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Diver's Na	ame: <u>6</u>	orden	Swint	1 Dive Locati	ion:	<u>ST</u>	Date of Dive: 3/12/09
				Water - S			
	Times	RPT Init	Instr. Type i	Serial Number	Cal Due	Locationion Diver	MaxiReading
1 <sup>st</sup> Survey							mrem/hr
2 <sup>nd</sup> Survey							mrem/hr
3 <sup>rd</sup> Survey							mrem/hr
4 <sup>th</sup> Survey					D		mrem/hr
5 <sup>th</sup> Survey							mrem/hr
6 <sup>th</sup> Survey							mrem/hr
7 <sup>th</sup> Survey							mrem/hr
8 <sup>th</sup> Survey							mrem/hr

				t of Water -				
	Time		linstr. Type	Serial Number	CallDue Date	Location on	W/O (Uncorrected)	Reading ()
1 <sup>st</sup> Survey	1550	INSA	1202	73356	2/2/10	All	< 0, 3 mrad/hr	<0.5 mrem/hr
2 <sup>nd</sup> Survey					, , ,		mrad/hr	mrem/hr
3 <sup>rd</sup> Survey							mrad/hr	mrem/hr
4 <sup>th</sup> Survey							mrad/hr	mrem/hr
5 <sup>th</sup> Survey		·					mrad/hr	mrem/hr
6 <sup>th</sup> Survey							mrad/hr	mrem/hr
7 <sup>th</sup> Survey		1					mrad/hr	mrem/hr
8 <sup>th</sup> Survey							mrad/hr	mrem/hr

It Discrete Radioactive Particle(s) <10 mrad/hr, then RPT to survey diver suit approximately every 1 - 2 hr (based on evolutions and work environment), perform detailed w/o & w/c survey, attempt to decon and allow diver to return to water. If Discrete Radioactive Particle >10 mrad/hr and <500 mrad/hr, then RPT to survey diver suit approximately every 1/2 hr, perform detailed survey, collect particles and allow diver to return to water. If Discrete Radioactive Particle >500 mrad/hr, then immediately remove diver from suit, perform detailed survey of suit, characterize particles and Initiate dose assessment. •

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Mail Hastman RP Technician (signed) Taskot

RP Supervision Review (signed)

5/12/09 Date lizlog Date

$\begin{bmatrix} RWP & OCC100 00054 \\ RE. Power - Dr 0 - Meason Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection + U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection - U_{ACCULATION of Final Processing of Re. Power - Dr 0 - Meason - Trank Inspection - Dr 1 - Dr 0 - Meason - Dr 1 - Dr $	DCGS Radiological Survey	No. CAA-09-03227 Date 3/12	2/09 Time 16:30	Location CST Ta		the second se	
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$\frac{12}{20}$ $12$		· · · ·	18	l-,			
Surveyor: [Print Name] MARE [ Herention action] $jB_{VCMTA}$ # = Gamma G.A. Signature Hereigues: (Print Name) jate = 5/2/09 # B = Beta DF - Direct Frisk Reviewes: (Print Name) jate = 5/2/09 # N = Neutron X-X. or = Rad Boundarn Signature jate = 5/2/09 # I # = Contact / 30 cm #/# jate = 5/2/09 # I # = Contact / 30 cm #/# jate = jate = 1/9 Contact Hd = Head, Ch = Chest, Kn = Knee, W = Waist # B / # = B/ $\gamma$ #/# Beta / $\gamma$ Contact Hd = Head, Ch = Chest, Kn = Knee, W = Waist # B / # = $\beta/\gamma$ #/# Beta / $\gamma$ 30 cm All dose rates in mrem/hr unless otherwise noted [A No Beta Detected Unless Otherwise Noted In No Beta Readings Taken Remarks: $\frac{\pi}{1}$ F $_1/fee = 290$ $\frac{\pi}{2}$ F $_1/fee = 300$ $\frac{\pi}{3} = 350$ $\frac{\pi}{4}$ $\frac{1}{3} = 300$ $MM f + 00^{+} 76026$ used to dose Kate F $_1/fee = 300$			19		1		
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