HACCP Step 1 – Activity Description

Activity Description	
Facility: Lock & Dams	**Site:** Locks & Dams on the McClellan-Kerr Navigation System
Project Coordinator: Everett Laney	**Activity:** Lock, Dam, and Waterway Maintenance
Site Manager: Lock Master	
Address: Tulsa District Office 1645 S. 101st East Ave Tulsa, OK 74128	
Phone: (918) 669-7411	

Project Description
i.e. Who; What; Where; When; How; Why

Tulsa District personnel operate tow boats that push a large barge which has a crane on it. Using this equipment is for the maintenance of locks, dams, and other structures on the McClellan-Kerr Navigation System. The tow boats work exclusively on the navigation system. This description assumes that the tow boats and barges could be sent outside of the Tulsa and Little Rock Districts for use.

The species listed in this HACCP Plan are of primary concern to the Tulsa District. For a detailed list of additional species, refer to your state's Aquatic Nuisance Species (ANS) Management Plan.

Kansas:
http://www.kdwp.state.ks.us/news/Fishing/Aquatic-Nuisance-Species/KS-Nuisance-Species-Plan

Oklahoma:
http://anstaskforce.gov/State%20Plans/OK/OKLAHOMA%20ANS%20PLAN%20JULY08.pdf

Texas:
Currently the Texas ANS Management Plan is under development
http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_pl_t3200_1221_draft.doc

HACCP Step 2 – Identify Potential Hazards

(to be transferred to column 2 of HACCP Step 4 – Hazard Analysis Worksheet)

Hazards: Species Which May Potentially Be Moved/Introduced
Vertebrates:
Invertebrates: Zebra mussels
Plants: Eurasian milfoil Alligator weed Common reed – genus *Phagmites* Algae (golden)
Other Biologics (e.g. disease, pathogen, parasite):
Others (e.g. construction materials, etc.):

HACCP Step 3 – Flow Diagram

Flow Diagram Outlining Sequential Tasks to Complete Activity/Project
Described in HACCP Step 1 – Activity Description
(to be transferred to column 1 of the HACCP Step 4 – Hazard Analysis Worksheet)

Task 1	Leave marine terminal and proceed to work area.
⇓	
Task 2	Conduct maintenance activities.
⇓	
Task 3	Return tow boat and/or barge to the marine terminal or send/return to another District.

HACCP Step 4 - Hazard Analysis Worksheet

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 1 **Leave marine terminal and proceed to work area**	**Vertebrates**	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussels are in all of the waters of the navigation system and can get on the tow boat, barge, and equipment.	None are required because all water where these vessels operate are infested.	No
	Plants Eurasian milfoil Alligator weed Common reed – genus *Phagmites* Algae (golden)	Yes	All of these plants occur within the navigation system and can get on the tow boat, barge, and equipment.	None are required because all water where these vessels operate are infested.	No
	Others	No			No
Task 2 **Conduct maintenance activities**	**Vertebrates**	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussels could get on the tow boat, barge, and equipment.	None are required because all water where these vessels operate are infested.	No
	Plants Eurasian milfoil Alligator weed Common reed – genus *Phagmites* Algae (golden)	Yes	Any of these plants can get on the tow boat, barge, and equipment.	None are required because all water where these vessels operate are infested.	No
	Others	No			No

HACCP Step 4 - Hazard Analysis Worksheet (continued)

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 3 **Return tow boat and/or barge to the marine terminal or send/return to another District**	**Vertebrates**	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussel adults and veligers could still be on the tow boat, barge, and equipment.	None at this time.	Yes
	Plants Eurasian milfoil Alligator weed Common reed – genus *Phagmites* Algae (golden)	Yes	Plants could be on the tow boat, barge, and equipment.	None at this time.	Yes
	Others	No			No

HACCP Step 5 – HACCP Plan Form

HACCP Plan Form (all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)								
			Monitoring					
Critical Control Point (CCP)	**Significant Hazard(s)**	**Limits for each Control Measure**	**What**	**How**	**Frequency**	**Who**	**Evaluation & Corrective Action(s) (if needed)**	**Supporting Documentation (if any)**
Task 3 **Return tow boat and/or barge to the marine terminal or send/return to another District**	Zebra mussels Eurasian milfoil Alligator weed Common reed – genus *Phagmites* Algae (golden)	None	All areas of the tow boat, barge, and equipment.			Tow boat, barge, and equipment operators	It is impractical to decontaminate tow boats, barges, and equipment from the infested water of the navigation system before sending to non-infested water of another District.	

HACCP Plan has been discussed with all employees. It is the manager's responsibility to review plan with all new employees as required.

Facility:	**Address:**
Signature:	**Date:**