Boom Deployment Drill

December 11, 2018

Emergency Action Plan – Oil Release to Waters of the State

Dickerson Generating Station

21200 Martinsburg Road

Dickerson Maryland 20842

Dickerson Generating Station

Three coal-fired steam units:

Unit 1 – 179 MW (net), 1959
Unit 2 – 179 MW (net), 1960
Unit 3 – 179 MW (net), 1962

Two Gas/Oil-fired GE 7F CTs

H1 CT – 147/167 MW (net), 1992
H2 CT – 147/167 MW (net), 1993

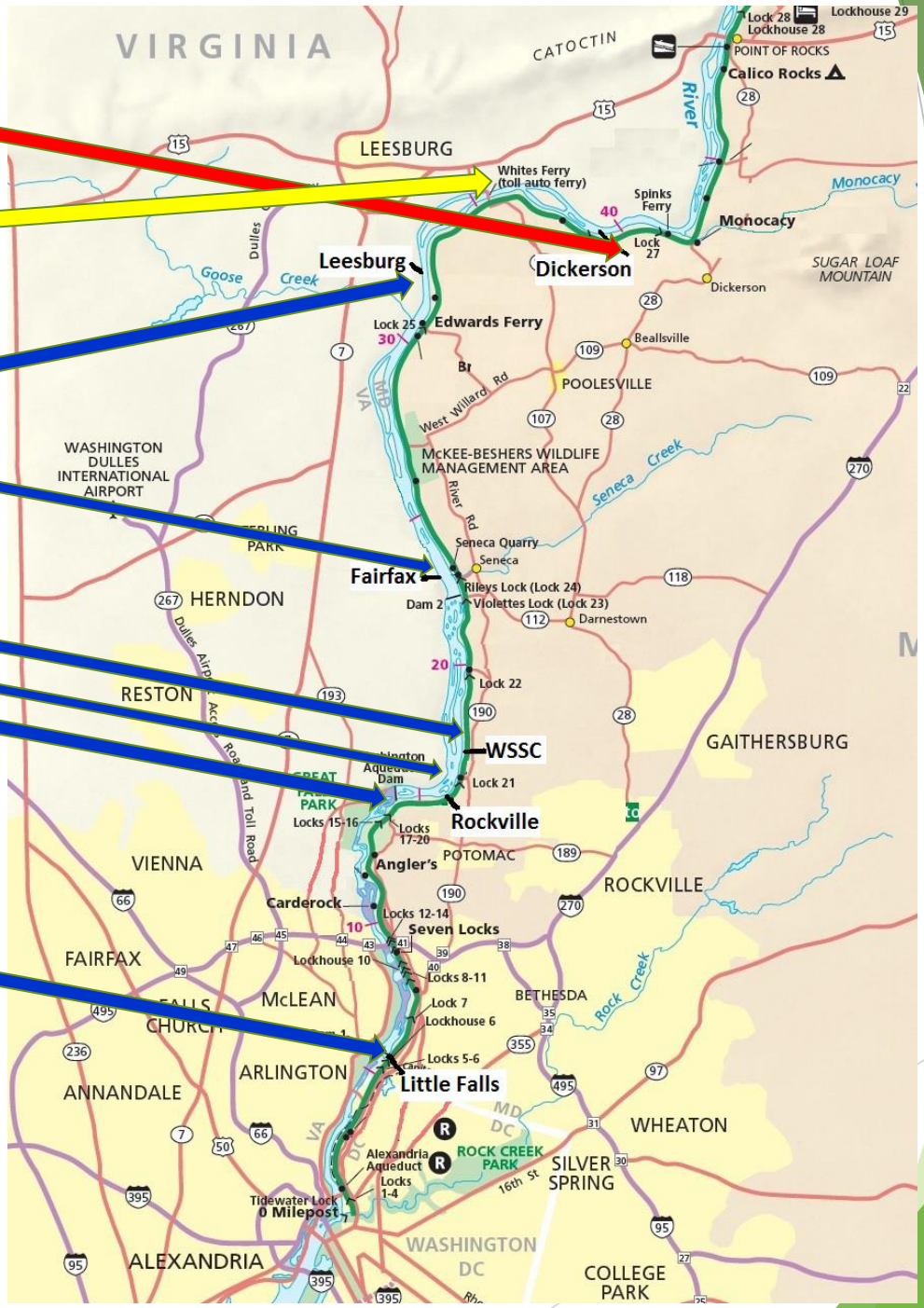
One Oil-fired Blackstart CT

D1 CT – 18 MW (net), 1967

Dickerson Sta.

Whites Ferry

Water Intakes



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USCG PREP Guidelines

Purpose

The National Preparedness for Response Exercise Program (PREP) was developed to demonstrate the intent of sections of Federal Regulations under:

- Oil Pollution Act of 1990 (OPA 90),
- Federal Water Pollution Control Act (FWPCA),
- Spill response preparedness [33 U.S.C. 1321 (j)]

The PREP satisfies the exercise requirements of:

- US Coast Guard,
- Environmental Protection Agency (EPA),
- Research and Special Programs Administration (RSPA) Office of Pipeline Safety, and
- Minerals Management Service (MMS).

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Planning Volumes for Oil :

Maximum Most Probable (USCG) / Medium (EPA) Discharge:

- For EPA-regulated facilities, a discharge greater than 2,100 gallons [50 barrels] and less than or equal to 36,000 gallons [858 barrels] or 10 percent of the capacity of the largest tank at the facility, whichever is less [40 CFR 112.20].

- Dickerson largest oil tank is 10,000,000 * 10% = 1,000,000 gallons

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Equipment Deployment Exercises

The requirements for the equipment deployment exercise are:

- Personnel that would normally operate or supervise the operation of the response equipment must participate in the exercise.
- Response equipment must be in good operating condition.

Dickerson has a trailer containing 1200’ of river boom to deploy at Whites Ferry as the primary means of mitigating a release to the river.

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Successful Completion of Government-Initiated Unannounced Exercise

The objectives in a government-initiated unannounced exercise for likely discharge include the following:

- Conducting proper notifications;
- Arrival of containment boom as specified in the approved response plan within **one hour** of detection of the discharge and the subsequent successful deployment;
- Arrival of oil recovery devices as specified in the approved response plan within **two hours** of detection of the discharge and the subsequent successful operation/simulated recovery;

Boom is to be on the water within 1 hr. and vac truck arrival within 2 hrs.

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First a safety meeting…..

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OSRO (Triumverate) work in full PPE

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Backing boom trailer into position on boat ramp

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Unload all boom rather than flake from trailer. If not, any snag may drag trailer into water once ferry begins to pull boom across river.

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Take one end to MD anchor point near water's edge.

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Next, bring VA end closest to boat, leaving enough slack to load extra to pull from secured anchor on boat to VA side land anchor.

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Ensure no cross overs; cables on top and bottom of boom must remain parallel and not twist once in water.

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Chain used to connect boom cable to anchoring points. A come-along used to release boom from boat anchor point, once secured to VA shore anchor.

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Loading slack onto ferry deck, and then secure to back of boat. Potential snag with ferry drive mechanism if secured to front of boat.

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Chase boat added as precaution to runaway boom or ferry…

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Ferry at VA side of river; unable to get boom to VA anchor point. Weight of ferry and water against boom caused concern for ferry cable break.

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Strong river current pushed water over boom at bottom of loop.
Oil would not be held with this booming strategy.

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(left) Anchor point (MD) pulled out of ground, (right) and barely held for lower cable anchor

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Overall a successful deployment drill.

Lessons learned:

A full river crossing is difficult given the strain on a single 1200’ line of boom.

Different boom strategies to be employed based on river currents, as indicated by river height. Ferry operator wants < 4’ average for the 3 closest USGS gauges – Point of Rocks, Edwards Ferry & Little Falls..

On Dec. 11th they were:

Point of Rocks	4’
Edwards Ferry	6.5’
Little Falls	1.1’
AVG	**3.9’**

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Lessons learned: Alternative booming strategies

Use smaller sections of boom above WF in a herringbone arrangement, utilizing WF landing as base of operations and recovery.

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Lessons learned:

Use Mason Island to funnel oil and contain on narrow side of river.

Dickerson NPDES Permit Renewal Effective 9/01/2018

Twice daily visual check at outfall for contaminants

47	6053931	01/28/2019 08:20 EST	I Peyton	**LOG ENTRY SHARED FROM 'DCK Steam Plant and FGD'** by ui1148a on 1/28/2019 08:21 EST **Category:** Environmental **Data:** Spill Checks Complete: YES; Station: Outside Operator; Checked Outfall 001 for visible sheen: YES Use Outfall 001 sampling platform as the standard point for observation; Visible Sheen Present?: NO 8 hours after last observation; Contaminants Present?: NO	Spill Checks Completed
6054285	01/28/2019 22:15 EST	B Dilworth	**LOG ENTRY SHARED FROM 'DCK Steam Plant and FGD'** by ub4053r on 1/29/2019 00:56 EST **Category:** Environmental **Data:** Spill Checks Complete: YES; Station: Outside Operator; Checked Outfall 001 for visible sheen: YES Use Outfall 001 sampling platform as the standard point for observation; Visible Sheen Present?: NO 8 hours after last observation; Contaminants Present?: NO	Spill Checks Completed	