

EXHIBIT 3 TO U.S. RESPONSE TO COMMENTS

Declaration of Charles C. Morris, PhD

I, Charles C. Morris, PhD, hereby declare and say:

1. The statements in this declaration are based on my 17 years of experience – seven years working for the Indiana Department of Environmental Management (IDEM) and ten years working for the National Park Service (NPS); on knowledge I have gained as an Environmental Manager with IDEM and Environmental Protection Specialist with NPS working on aquatic ecosystem health and sustainability, contaminant biology, environmental damage assessment, and environmental compliance; and on knowledge I have gained through my research activities and peer reviewed publication history in the field of aquatic and contaminant biology.

2. I received a Doctorate in Ecology and Evolutionary Biology from Indiana State University in 2012, a Master's Degree in Environmental Science/Toxicology and Chemistry from Troy University in 2002, a Bachelor's Degree in Fisheries and Aquatic Sciences from Purdue University in 1999, and an Associate's Degree in Conservation, Law Enforcement from Vincennes University in 1996.

3. One of my roles with the NPS at Indiana Dunes National Park (INDU or Park) is to serve as a technical expert in Aquatic Ecology and Contaminant Biology where I am responsible for synthesizing a range of technical information to provide comment/review/clarification on these materials to Park Management. It is under this role that I have provided statements in this declaration.

4. All decisions related to activities described herein have been made or approved by Park Senior Management. My role was to provide information, feedback, and recommendations to Park Senior Management as required/requested. The formal point of contact, and my immediate supervisor for the April 11, 2017 Spill, was Dan Plath, Chief of Natural Resources. The ultimate decision-making authority at Indiana Dunes National Park lies with the Park Superintendent, Paul Labovitz.

5. At 10:56 AM on April 11, 2017, NPS-INDU staff received a forwarded email containing an Incident Report (#1175399), attached, from NPS-Regional staff to advise the Park of a release of an "unknown" contaminant of "unknown" volume into Burns Ditch. At 12:30 PM Park staff received a follow-up email with a heading "Re: Hexavalent Chromium Spill," which attached an updated Incident Report still indicating a release of an "unknown" contaminant of "unknown" volume. Shortly after receiving this email NPS Regional staff contacted the Park's Resource Management Division, whose staff were already en route to the site at this time, and who provided a verbal update. Once onsite Park staff contacted the Environmental Protection Agency's federal on-scene coordinator, who provided Park staff with a status update.

6. All relevant parties, myself included, gathered in a large conference room at U. S. Steel's Portage facility to plan a course of action. Since it was getting late in the day, and light was fading, an initial sampling plan was established. We identified approximately 25 surface water sites within Burns Ditch and seven locations along Lake Michigan (Lake Michigan sites were identified as per their INDU swimming beach designations: West Beach, Ogden Dunes, Portage Lakefront, Boater Beach, Porter Beach, Kemil Beach, and Dunbar Beach). No one onsite at that time had a boat available to access any sampling locations outside the protection of the harbor. National Park Service staff participated in initial water sampling in Burns Ditch, and provided a small boat and two operators. U. S. Steel contractors collected the water samples from the NPS boat.

7. National Park Service Senior Management reviewed the initial sample results, and due to the fact that it was not clear at that time how much Hexavalent Chromium (Cr^{6+}) was released, came to the conclusion that there was not enough information to determine whether it was safe to use the beaches. Out of caution for the public, NPS decided to close the beaches and wait for the test results to arrive before we could reopen them. Park Management decided that there needed to be a minimum of three consecutive sampling events showing all sites were non-detect for Cr^{6+} before NPS could reopen the beaches.

8. On April 12th a morning briefing was held to assess the previous night's sampling activities. At this meeting it was decided by all present, including representatives from EPA, U. S. Steel, NPS, the City of Ogden Dunes, Indiana American Water, Indiana Department of Environmental Management, Portage police, and City of Portage beaches (henceforth referred to as the "Team"), to include additional sampling locations to the sampling design along the four NPS beaches of West Beach, Ogden Dunes, Portage Lakefront, and Boater Beach. These samples were collected by U. S. Steel's contractor and taken to a contract lab for analysis. NPS provided logistical support and a YSI multiprobe to measure basic water chemistry.

9. After sampling had been initiated the NPS purchased the necessary reagents to analyze water samples for total chromium and Cr^{6+} . These reagents were used with a DR3900 Spectrophotometer (HACH brand) available at the NPS laboratory at Indiana Dunes National Park. Detection using Methods 10218 (Cr^{6+}) and 10219 (total chromium) ranges from 0.03 to 1.00 mg/L, TNTplusTM 854.

10. To preserve water samples for total chromium analysis, sample pH was adjusted to less than 2 (standard procedures for this test). Preserved samples, held below 6°C, have a holding time of up to six months. Preservation for Cr^{6+} analysis can also be performed with a pH adjustment, but the holding time is only 24 hours. Due to the time necessary to acquire appropriate reagents to run these analyses, only total chromium was run by NPS on initial samples (holding time would have expired for analysis of Cr^{6+}). All Cr^{6+} sample results provided to NPS from U. S. Steel from sites outside of Burns Ditch were under their laboratory reporting limit (0.005 mg/L). Park staff reviewed these results, which met the requirement of three

consecutive sampling events showing non-detect for Cr^{6+} , and subsequently reopened Park beaches on April 17, 2017.

11. After initial sampling was underway, the Team decided that U. S. Steel would continue collection of water samples throughout the recreational season (Memorial Day to Labor Day) at West Beach, Ogden Dunes, Portage Lakefront, and Porter Beach. This sampling coincided with the Park's weekly bacteria beach monitoring program. These samples, collected by U. S. Steel, were analyzed at a local contract lab. Additionally, the NPS collected water samples at these beaches in conjunction with the beach bacteria monitoring program. The NPS-collected samples were analyzed at the NPS laboratory for Cr^{6+} and total chromium. Trivalent chromium (Cr^3) was calculated by subtracting the Cr^{6+} concentration from that of total chromium. Park Management decided that they would address the potential for future beach closings based on the review of each week's Cr^{6+} sampling results. If any single sample came back at or above detection, the Park would take the appropriate actions to ensure visitor safety. All results from samples collected by the NPS in 2017 and analyzed for Cr^{6+} were below the detection limit of the available instrumentation (0.03 mg/L). All sample results provided to the NPS from U. S. Steel for Cr^{6+} were under their laboratory reporting limit (0.005 mg/L). Since no samples collected over the summer had detectable levels of Cr^{6+} , no additional beach closures due to the April 11, 2017 Spill were required.

12. Working with the EPA lead, the NPS discussed whether to do further investigation, including sediment sampling. EPA and U. S. Steel chemists believed, by the nature of the chemical, that the Cr^{6+} would have quickly dispersed throughout the system and that we would not be able to find it in the sediment or distinguish it from the background in the sediment from U. S. Steel's legal NPDES discharges. This contention was supported by the unstable nature of Cr^{6+} which will rapidly reduce to its more stable form Cr^{3+} (90%+ reduction in toxicity). Given the legally permitted NPDES discharge of Cr^{3+} at this Burns Ditch location, it would be nearly impossible to discriminate the reduced Cr^{6+} from background Cr^{3+} .

13. If there was an imminent risk to natural resources, there should have been some evidence of a fish kill. It was theoretically possible that dead fish sank to the bottom of Burns Ditch and rolled with the current, out of sight, and out into Lake Michigan. Just in case dead fish did make it out to the Lake unseen, NPS staff followed up with beach surveys looking for dead fish. Any dead fish would have begun to float from decay after a day or so, and at least a few would have washed up on the beach. No dead fish were located, evidencing that no fish kill occurred. This interpretation is consistent with the water sample results generated, described above.

14. Based on the data collection, testing, and surveys, the NPS concluded that no measurable natural resource injuries occurred within Park boundaries, and focused on calculating damages based on the lost visitor use during the week the beaches were closed.

I hereby declare under penalty of perjury that the foregoing is true and correct.

Dated this 17 day of June, 2019.



Charles C. Morris, PhD

NATIONAL RESPONSE CENTER 1-800-424-8802

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Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1175399

INCIDENT DESCRIPTION

*Report taken by: CIV JUSTIN MURRAY at 10:33 on 11-APR-17

Incident Type: FIXED

Incident Cause: UNKNOWN

Affected Area: BURNS WATERWAY

Incident was discovered on 11-APR-17 at 09:30 local incident time.

Affected Medium: WATER / BURNS WATERWAY

REPORTING PARTY

Name: MARK HENRY

Organization: UNITED STATES STEEL CORPORATION

Address: US HWY 12

PORTAGE, IN 46368

PRIMARY Phone: (219)7635869 CELLULAR Phone: (219)7127619

Type of Organization: PRIVATE ENTERPRISE

SUSPECTED RESPONSIBLE PARTY

Name: MARK HENRY

Organization: UNITED STATES STEEL CORPORATION

Address: US HWY 12

PORTAGE, IN 46368

PRIMARY Phone: (219)7635869 CELLULAR Phone: (219)7127619

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

US HWY 12 County: PORTER

City: PORTAGE State: IN Zip: 46368

RELEASED MATERIAL(S)

CHRIS Code: UNK Official Material Name: UNKNOWN MATERIAL

Also Known As:

Qty Released: 0 UNKNOWN AMOUNT

Qty in Water: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING THE DISCOVERY OF A DISCOLORATION IN THE WATER
NEAR AN OUTFALL AT THEIR FACILITY. THE SOURCE AND CAUSE ARE
UNKNOWN.

SENSITIVE INFORMATION

INCIDENT DETAILS

Package: NO

Building ID:

Type of Fixed Object: MANUFACTURING FACILITY

Power Generating Facility: NO

Generating Capacity:

Type of Fuel:

NPDES:

NPDES Compliance: UNKNOWN

---WATER INFORMATION---

Body of Water: BURNS WATERWAY

Tributary of: LAKE MICHIGAN

Nearest River Mile Marker:

Water Supply Contaminated: UNKNOWN

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:

FATALITIES: NO Empl/Crew: Passenger: Occupant:

EVACUATIONS:NO Who Evacuated: Radius/Area:

Damages: NO

Closure Type	Description of Closure	Hours Closed	Direction of Closure
N			

Air:

N Major

Road:

N Artery:N

Waterway:

N

Track:

Environmental Impact: UNKNOWN

Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

AREA WAS SHUT DOWN. INCIDENT IS BEING INVESTIGATED.

Release Secured: UNKNOWN

Release Rate:

Estimated Release Duration:

WEATHER

Weather: PARTLY CLOUDY, 2°F

ADDITIONAL AGENCIES NOTIFIED

Federal:

State/Local:

State/Local On Scene:

State Agency Number:

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP)

11-APR-17 10:40 (770)4887100

DHS NOC (NOC)

11-APR-17 10:40 (202)2828114

CG INVESTIGATIVE SVC CHICAGO (CGIS RAO CHICAGO)

11-APR-17 10:40 (630)9862160

DHS DEFENSE THREAT REDUCTION AGENCY (CHEMICAL AND BIOLOGICAL TECHNOLOGI

11-APR-17 10:40 (703)7673477

MI OFFICE OF INTEL AND ANALYSIS (FIELD OPERATIONS DIVISION)

11-APR-17 10:40 (919)9674500

DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)

11-APR-17 10:40 (202)3661863

EPA CRIMINAL INVESTIGATION DIVISION (CID REGION V)

11-APR-17 10:40 (312)8869872

U.S. EPA V (MAIN OFFICE)

(312)3532318

IN STATE DEPT OF HOMELAND SECURITY (SITUATIONAL AWARENESS)

11-APR-17 10:40 (317)2336115

NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)

11-APR-17 10:40 (202)2829201

NOAA RPTS FOR IN (MAIN OFFICE)

11-APR-17 10:40 (206)5264911

NATIONAL RESPONSE CENTER HQ (AUTOMATIC REPORTS)

11-APR-17 10:40 (202)2671136

SECTOR LAKE MICHIGAN (COMMAND CENTER)

(414)7477182

OFFICE OF ENV. POLICY & COMPLIANCE (MAIN OFFICE)

11-APR-17 10:40 (215)5975012

IN DEPT ENV MNGMT (MAIN OFFICE)

11-APR-17 10:40 (317)2337745

USCG DISTRICT 9 (COMMAND CENTER)

11-APR-17 10:40 (216)9026109

ADDITIONAL INFORMATION

CALLER WILL MAKE STATE NOTIFICATIONS NEXT.

*** END INCIDENT REPORT #1175399 ***

Report any problems by calling 1-800-424-8802

PLEASE VISIT OUR WEB SITE AT <http://www.nrc.uscg.mil>