DEPARTMENT OF LAW

CITY OF CHICAGO

July 6, 2018

VIA U.S.P.S. & ELECTRONIC MAIL

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RE: CITY OF CHICAGO'S COMMENTS Concerning the Proposed Consent Decree in *United States, et al. v United States Steel Corporation,* D.J. Ref. No. 90-5-2-1-06476/2

Dear Acting Assistant Attorney General Wood:

The Corporation Counsel of the City of Chicago submits these comments on behalf of the City of Chicago ("City") pursuant to 28 C.F.R. § 50.7(a) and the U.S. Department of Justice's ("DOJ") solicitation, 83 Fed. Reg. 14,891 (Apr. 6, 2018), regarding the proposed Consent Decree in *United States et al. v. United States Steel Corporation, 2:18-cv-00127 (N.D. Ind., 2018).*[1]

The proposed Consent Decree purports to resolve the United States' and the State of Indiana's claims against the United States Steel Corporation ("U. S. Steel") for violations of the

[1] On June 26, 2018 and June 29, 2018, U.S. EPA posted on its website new U. S. Steel submittals related to the proposed Consent Decree. The posting of the new materials so close to DOJ's comment deadline did not afford the City adequate time for technical review of these submittals prior to transmitting this comment letter. Given the importance of U. S. Steel's technical submittals in evaluating the sufficiency of the proposed Consent Decree, the City requests that DOJ establish an additional public comment period for interested members of the public, such as the City, to supplement their initial comments.

Clean Water Act ("CWA"), 33 U.S.C. §§ 1251 *et seq.*, and the Emergency Planning and Community Right to Know Act ("EPCRA"), 42 U.S.C. §§ 11001 *et seq.*, arising out of, *inter alia*, U. S. Steel's illegal discharges of pollutants from its manufacturing facility at 6300 U.S. Highway 12, Portage, IN 46368 ("Midwest Plant"), to Burns Waterway and Lake Michigan, including an April 2017 discharge of hexavalent chromium.

The City's interest in this case stems from its vital interests relating to Lake Michigan. Not only is Lake Michigan an indispensable economic engine for the City and a beloved source of recreation and tourism for the City's residents and guests, but it is also the City's sole source of drinking water. The City, through its Department of Water Management, owns and operates two of the world's largest conventional water treatment plants. With a combined capacity of 2,100 million gallons per day, these plants provide drinking water to over 5 million citizens and customers, or over 40% of the population of Illinois, including the City's citizens, schools, health care facilities, food establishments, and other businesses, as well as 125 surrounding Illinois communities.

In addition, large numbers of both City residents and visitors recreate in and along the shore of Lake Michigan, both in the City itself and in nearby Northwest Indiana communities, including Indiana Dunes National Lakeshore. The ability to recreate in Lake Michigan without fear of excessive and illegal pollutant discharges both enhances Chicago metro area residents' quality of life and serves as an economic engine for the City and region.

The City has been substantially injured by U. S. Steel's CWA violations and reasonably believes that circumstances at the Midwest Plant continue to threaten the City's interests, including its interests in safe drinking water, delivery of safe drinking water to citizens and customers, and maintaining its massive drinking water infrastructure free of excessive hexavalent

chromium contamination.[2] Unfortunately, however, even full compliance by U. S. Steel with the terms of the proposed Consent Decree will not bring the Midwest Plant into compliance with the CWA or prevent future toxic spills and violations.

The City's questions and concerns regarding the Consent Decree's proposed technical compliance requirements are detailed below. This comment also discusses the City's opposition to the current proposed civil penalty, which is too low, and the City's belief that any final Consent Decree must include a Supplemental Environmental Project component.

While the City welcomes the United States' and State of Indiana's decision to pursue overdue civil enforcement of the Midwest Plant's numerous CWA violations, the City cannot support entry of the proposed Consent Decree by the Court without modifications that address our concerns presented here.

I. ANALYSIS OF TECHNICAL COMPLIANCE REQUIREMENTS

The City's comments are structured to track the major subdivisions of the Consent Decree, and first discuss questions and concerns raised by review of its technical compliance provisions.

A. Consent Decree § VI., ¶ 9. - Actions Taken by U. S. Steel Prior to Lodging of Consent Decree

Based upon the limited information available from the United States and the State of Indiana, it seems appropriate that U. S. Steel was required to line the leaking concrete trench with epoxy coating and to replace a single-wall heat exchanger with a double-wall model. As noted in the Consent Decree, this work is already complete. Lining the trench, however, reduced the trench's volume and hydraulic capacity. Therefore, the Consent Decree should also require U. S. Steel to perform calculations to determine whether the rehabilitated trench is adequate for

[2] On January 24, 2018, prior to the filing of the Complaint and Consent Decree by the United States, the City filed suit against U. S. Steel in a case captioned *City of Chicago v. United States Steel Corporation, 2:18-cv-00020 (N.D. Ind., 2018)* in an effort to protect its vital interests against U. S. Steel's past and ongoing violations of the CWA.

secondary containment of plant flows including rainfall that might drain into it, and to take further corrective action in accordance with the results of such calculations.

B. Consent Decree §VI., ¶10. - Facility Wastewater Operation and Maintenance Plan

The Consent Decree obligated U.S. Steel to develop a comprehensive Wastewater Operation & Maintenance Plan ("O&M Plan"), which must also include a preventative maintenance plan. Subsequent to the City's detailed review of the submitted draft O&M Plan, The U.S. Environmental Protection Agency ("EPA") and Indiana Department of Environmental Management ("IDEM") partially disapproved the plan.[3] U. S. Steel recently submitted a revised plan, but because the revised plan was not available to the City in time for the City to conduct a thorough review before the comment deadline, these comments are limited to the initial draft plan submitted by U.S. Steel on April 13, 2018. The City's questions and requested modifications concerning the O&M Plan appear to be broader than the grounds by which EPA and IDEM partially rejected the April 13, 2018 submittal.[4]

The O&M Plan, including the Preventative Maintenance Plan contained within it, fails to satisfy the requirements of the proposed Consent Decree, and does nothing to bring the Midwest Plant into full CWA compliance. In fact, the vast majority of the 116-page document is merely a copy of the Midwest Plant's NPDES permit. The remaining 16 pages provide only the following content:

- An overview of the Midwest Plant's CWA NPDES permit;

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[3] U.S. EPA and IDEM Partial Disapproval of U. S. Steel Submittal Pursuant to Consent Decree (2:18-cv-00127 (May 30, 2018), *available at* https://www.epa.gov/sites/production/files/2018-05/documents/partial_disapproval_of_wastewater_treatment_om_manual_and_preventive_maintenance_program_.pdf.

[4] As noted, *supra*, at note 1, the City requests that DOJ establish an additional public comment period so that members of the public can supplement their comments based on review of recent U. S. Steel submittals.

- For each of the five wastewater treatment facilities, a brief description, a table referencing operating procedures, a list of equipment with capacities and schedules for preventative maintenance inspections, a schedule for equipment calibration and a list of forms (log sheets and reports);

- Job descriptions for 11 staff; and

- A description of general requirements and qualifications of the Midwest Plant's third-party analytical laboratory.

The document should be re-drafted to address the deficiencies indicated below, and to include the additional items recommended by the City in this submittal.

1. Wastewater Operation & Maintenance Plan Deficiencies

a. While the draft O&M Plan provides a description of the sections of the NPDES permit that is a useful guide to its contents, operators need to know the key requirements of the permit relevant to actually operating the facility. Thus, the manual should include a quick reference summary of these requirements from both Parts I and III of the NPDES permit (e.g. permit limits and monitoring requirements; and if operators are responsible for them, reporting requirements).

b. The O&M Plan should provide a list of contractors and outside vendors involved in the operation of the facility, their role or specialty, and their contact information (e.g., the analytical laboratory vendor).

c. Actual operations procedures are referenced as found in other documents, but those other documents are not appended or otherwise included in the O&M Plan. Considering the proposed Consent Decree's focus on reliable operation of the wastewater treatment systems as a mechanism for ensuring CWA compliance, these procedures should be included directly in the manual.

d. As discussed above in (c), the O&M Plan lacks operational procedures for review, such that the adequacy of any operational procedures cannot be evaluated. At a minimum, these procedures should include: details and instructions on how to operate each treatment system, overall design criteria and system capacities, instrumentation and control logic, and troubleshooting guidelines.

e. An operational procedure for the Midwest Plant's response to a spill or release to land, air or water should be included as applicable for each treatment facility.

f. The EPA inspection report following the April 2017 incident[5] describes a twice annual inspection and cleaning of the wastewater treatment plants. A written operation procedure for this process should be developed for each treatment plant, including the proper handling of any materials used in the cleaning process.

g. There is little information on the purpose, location and frequency of on-site analyses for process control.

h. Operator training requirements in the manual are generic and not specific to the facility. Given the history of compliance issues detailed in the United States' complaint, additional detail for the Midwest Plant's treatment plant operators and current staff qualifications are needed. This should include licensing requirements.

i. Staffing levels by operator shift and intervals for regular, important preventative activities such as daily inspection rounds were omitted.

j. The laboratory requirements provided are insufficient in detail. They should include a list of requirements for both internal process control as well as those controls conducted by third-party vendor(s). Requirements that should be provided include: standard operating

[5] CWA Compliance Evaluation Inspection Report, U.S. EPA Region 5 (May 4, 2017), *available at* https://www.epa.gov/sites/production/files/2018-04/documents/in0000337_inspf_2017-05-04.pdf.

procedures (SOPs) for operating and maintaining equipment used onsite, and the required analytical methods for analysis conducted on- and off-site.

k. The O&M Plan states only that U. S. Steel complies with recordkeeping requirements outlined in the permit, and that data are kept for 5 years. This is inadequate given the violations alleged in the Complaint. The plan should include a discussion of how inspections, repairs and maintenance activities are tracked and recorded. Further, the O&M Plan does not list management and plant environmental contacts and phone numbers for operators to call if there are problems. Contacts to request instrumentation, electrical and mechanical maintenance repairs are also needed.

l. A schematic drawing titled "Chrome Treatment Plant – Reduction/Clarifier/De-watering" in Appendix II (Process Flow Diagrams) of the O&M Plan shows the set points for the chrome reduction system, but there is no information on the flow rates, retention time, and other parameters for the treatment system. The O&M Plan did not indicate whether the system has continuous flow through with the other train on standby, or alternates batches between trains A and B. The Train A fill line on the block flow diagram is marked "Flow Control" and the Train B fill line is marked "Level Control?"; the intent of the different controls is unclear.

m. The O&M Plan does not contain a description of which alarms would shut down the system (other than a reference in the schematic discussed at (k) and (l), *supra*, that shutdown occurs if the reduction tank ORP exceeds 300 for 5 minutes), how many hours of storage the influent chrome wastewater equalization tank provides, and whether production can be stopped if the tank fills due to problems in the treatment system. Based on flow rates provided in the "Chrome Treatment Plant – Reduction/Clarifier/De-watering" schematic, the influent equalization tank may have less than two hours storage time.

n. Piping and instrumentation drawings (or "PIDs") showing equipment tags, pumps, instruments, etc. were omitted.

o. A description of how the system is controlled (such as by local instruments, PLC and/or SCADA), and data logging to monitor for trends and to diagnose problems is also omitted.

p. Annual maintenance inspections of outfall channels is insufficient. Given that there is daily inspection of channels for water quality and problems with buildup in the channels noted in inspection reports, more frequent (monthly) outfall channel inspections are warranted. Details on the components of the inspection should also be included.

2. Preventative Maintenance Program Plan Deficiencies

U. S. Steel was obligated under the Consent Decree to develop a Preventative Maintenance Program Plan as part of the O&M Plan. The Preventative Maintenance Program Plan ("PMP Plan") is deficient for the following reasons:

a. Very limited information on preventative maintenance procedures is provided, and the submittal does not reference either the intent or specific requirements of the proposed Consent Decree.

b. A preventative maintenance program should include a description of the facility's assets, and those assets' age, condition and estimated usable life. It should include requirements to document the inspections noted in the plan, including copies of inspection forms. As provided, the PMP Plan neither describes the repair history, nor makes provisions for future documentation of repairs. The PMP Plan should also provide a replacement schedule for equipment and other treatment plant infrastructure.

c. Preventative maintenance for new equipment that U. S. Steel has installed in response to the recent incidents (such as new turbidity meters) should be included in the PMP Plan. In addition, the PMP Plan should be updated to include new equipment installed in response to Section VI.11 (Wastewater Process Monitoring System) requirements of the Consent Decree.

3. Requested Additions to the O&M Plan

In addition to the above-identified deficiencies in the O&M Plan, including deficiencies noted in the PMP Plan as well, the Consent Decree's requirements for the O&M Plan should be modified and expanded to include the following items, in order to ensure the Midwest Plant's compliance with the CWA and reduce the likelihood of future harmful discharge incidents:

a. The O&M Plan under the proposed Consent Decree focuses only on the Midwest Plant's five wastewater treatment facilities and their outfalls. The O&M Plan should also encompass the conveyance system leading from the process operations and the wastewater treatment facilities. The plan should include both conveyance schematics and geographically referenced plans to facilitate routine maintenance and emergency response. The size and material of the primary, and, where relevant, secondary containment conveyances should be noted. For conveyances that are below grade, access locations should also be included. Given the facts as alleged in the Complaint concerning certain of the CWA violations, it very important that the O&M Plan not skip over these conveyance systems.

b. The O&M Plan should include a description of Midwest Plant monitoring activity (both routine operational monitoring and compliance monitoring), standard operating procedures ("SOPs") for use of any monitoring equipment, and descriptions of analyzers used and their own routine maintenance requirements.

c. The O&M Plan should include a quality assurance project plan ("QAPP") for both routine and compliance monitoring and analytical procedures conducted in the wastewater, storm water, and non-

contact cooling water monitoring locations, both in the treatment facilities and their conveyance systems. Monitoring and analytical work conducted at the facility, including by third-party contractors, should be audited annually by a quality control officer with respect to consistency with the QAPP requirements. The QAPP should also be updated regularly when changes are made regarding equipment used, monitoring locations, parameters analyzed, and/or analytical laboratories engaged to perform testing.

d. The O&M plan should include a provision for each treatment facility regarding alarm setpoints and actions to be taken for each alarm.

e. U. S. Steel should be required to have a standardized procedure for documenting repairs and other preventative maintenance work. The EPA inspection report[6] referenced on-going plans by U. S. Steel to automate this work (presumably through some form of an electronic asset management system). It is insufficient to merely reference this work in an inspection report; it should instead be memorialized and required by adding it to a revised PMP Plan.

f. The Consent Decree requires that U. S. Steel implement both the O&M Plan and PMP Plan after receiving comments from EPA and IDEM. Implementation should begin now, given that the documents have already been developed, as these actions will take time to

[6] *See, supra*, note 5.

implement, during which another incident could occur. Implementation can be adjusted, if needed, following receipt of comments or further disapproval letters from the agencies.

g. Section VI.10.e of the Consent Decree includes a requirement for U. S. Steel periodically to review its O&M Plan and make changes as needed. A similar requirement should be included for the PMP Plan or the existing language should be clarified to make clear that this obligation also applies to the PMP Plan.

h. Section VI.10.f should be modified to include a requirement to also submit the PMP Plan (and annual reviews thereof) with any application to renew the Midwest Plant's NPDES permit.

C. Consent Decree §VI., ¶ 11. - Wastewater Process Monitoring System

The requirements of this section of the Consent Decree cannot be meaningfully evaluated until U. S. Steel fully describes its existing process monitoring and submits a report to the regulatory agencies with its recommendations. The report should include a daily schedule for monitoring that can be added to the O&M Plan. The following City comments are based upon existing publicly available information and U. S. Steel's initial submittals prior to June 2018, because U. S. Steel's revised and new submittals in late June 2018 were not available in time for meaningful review prior to DOJ's submittal deadline.

The City is concerned that the Midwest Plant has inadequate monitoring in place for the very parameter that spurred our involvement in this matter, hexavalent chromium. Continuous effluent (or clarifier overflow) monitoring for turbidity as a surrogate for total suspended solids ("TSS") could provide an indication of clarifier plate upset and/or problems with the Dynasand

filters. But turbidity, or for that matter "TSS", does not measure soluble hexavalent chromium. For that parameter, an on-line analyzer would be needed, set up to take a grab sample of the flow at regular intervals, such as every 30 minutes.

Thus, the proposed Consent Decree should be modified to require that U. S. Steel add on-line, automated monitoring for soluble hexavalent chromium at outfalls 104 and 204, as this would provide improved assurance of proper operation of the treatment systems. Several companies provide these analyzers, an example of which can be found at https://www.metrohm.com/en-us/products-overview/process-analyzers/.

Other locations for on-line analyzers for soluble hexavalent chromium should also be required, to (1) provide early warning of potential process issues (an increase in soluble hexavalent chromium would not necessarily be seen by a turbidity meter designed to track an increase of solids), and (2) identify any increases in chromium at outfall 004 prior to discharge.

D. Consent Decree §VI., ¶12 - Hexavalent and Total Chromium Monitoring

The City supports the requirement for the increased monitoring frequency of total and hexavalent chromium at outfalls 104 and 204. However, as noted immediately above, U. S. Steel should add an on-line analyzer for hexavalent chromium, as this would provide greater assurance of proper operation of the treatment systems. After a period of validation testing in conjunction with the daily monitoring required by the permit, this automated analyzer could potentially be used to replace the daily testing required by the proposed Consent Decree at outfalls 104 and 204.

E. Consent Decree Appendix B: Midwest Spill Evaluation and External Reporting Requirements

The spill notification procedures fail to include a time frame for notifying the listed entities in the event of a spill. The standard conditions section of the Midwest Plant's NPDES permit issued in 2016 (Part II.C.3) requires 24-hour notice for the violation of the maximum

daily discharge limits of several parameters including total chromium and hexavalent chromium. This 24-hour timeframe should also be included in Appendix B and be inclusive of all parties to be notified under the proposed Consent Decree.

In addition, it is unclear what constitutes notification, particularly for notifications that must be made to external entities like the City DWM. The procedures should include a requirement for an affirmative response (such as direct communication or a reply message) from the external entity to ensure receipt (this is reasonable given the limited number of external entities receiving notification). The procedures should also require at least one additional form of notification, such as an e-mail message. Finally, for spills reaching the Burns Waterway, given that it discharges into Lake Michigan, a briefing (in person or by conference call) should be required immediately after an active spill has been contained (as was done on the morning on April 12, 2017) to discuss the response and on-going plans for spill monitoring. The City of Chicago should be included in the briefing.

F. Requested Additional Technical Compliance Provisions

In addition to the deficiencies in the O&M Plan and the PMP Plan noted above, the City requests that the following additional technical compliance requirements be required by the Consent Decree in order to provide adequate assurance that CWA compliance will be achieved and future illegal discharges avoided.

1. Responses to Other Incidents: The proposed Consent Decree does not outline steps that U. S. Steel undertook in response to either the October 2017 chromium spill or the January 2018 failure of a heat exchanger[7], both of which resulted in release of chromium. These should be included in the Consent Decree through additional narrative of U. S. Steel's response

[7] *See* Letter from Bruce Kizer, Office of Land Quality Branch Chief, IDEM to U. S. Steel (Apr. 23, 2018), available at IDEM Virtual File Cabinet, https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=82534425&dDocName=82534653&Rendition=web&allowInterrupt=1&noSaveAs=1&fileName=82534653.pdf..

actions, if any, in Section VI of the Consent Decree. An understanding of all steps taken is vital to formulating a comprehensive plan for achieving future compliance.

2. Wastewater Systems and Operations Measures Related to April 2017 Process Failures: Based on its review of EPA inspection reports, the City currently understands the April and October 2017 spills to have different root causes: the April spill occurred because of equipment failure and corrosion of underlying structures, while the October spill occurred because of poor operational control of the chromium wastewater treatment plant. The EPA inspection report on the April 2017 spill[8] attributes the spill of highly corrosive chromium trioxide (indicated by its pH value of 1) to failure of an expansion joint which leaked into a concrete containment trench, whose bottom had failed, whereby the contents of the spill had corroded the underlying carbon steel pipe that was influent to the North Final treatment plant. Additional actions that should be included in the Consent Decree in response to this April 2017 spill include:

a. The Consent Decree should require an immediate inspection of all the secondary containment trenches at the Midwest Plant. A note in the EPA inspection report of the removal of "39 barrels of goo" from the trench belies proactive maintenance practices. The chemical composition of the "goo", presumably already analyzed, should be reported in the Consent Decree. If inspection of all secondary containment trenches has occurred, the activity should be documented in Section VI.9 (Actions Taken by U. S. Steel Prior to Lodging of Consent Decree). The inspection should document if any other breaches were discovered in the secondary containment trenches, and document completed or planned repairs, and environmental sampling in the vicinity of the breaches to determine if a release occurred. Data on the chemical

[8] *See, supra*, note 5.

composition and disposal of the "goo" found in the containment trench that failed should be made available. If inspections of other trenches similarly indicate that they material, the material should be tested prior to disposal.

b. There is no description of the repair of the carbon steel line that was corroded allowing the inflow of the corrosive chromium trioxide. Again, if already completed, the repair should be documented in Section VI.9 of the Consent Decree. If not already completed, repair must be explicitly required in the Consent Decree.

c. The Consent Decree should require an internal (ideally using CCTV) inspection of the carbon steel line to assess its structural integrity as it is reasonable to expect that the corrosive chromium trioxide could have weakened the pipe in other locations (the identified spill must have been on-going for a not insignificant period of time to have damaged both the bottom of the secondary containment trench and the underlying pipe).

d. The Consent Decree should require an investigation of the soils underlying both the concrete trench and carbon steel pipe for contamination by total chromium and/or hexavalent chromium, and any other potential contaminants present in the "goo" found in the trench. Hexavalent chromium is soluble and poses a potential on-going risk for groundwater contamination (and subsequent release to surface water) and to workers who repair the pipeline or contact the soil in other ways in the future. If needed, the contaminated soil and groundwater should be remediated.

e. The Consent Decree should require the installation of an on-line soluble chromium probe in Outfall 104's pipe to monitor for other accidental releases of chromium from the Final Treatment Plant.

4. Wastewater Systems and Operations Measures Related to October 2017 Process Failures: In its January 4, 2018 letter to IDEM, U. S. Steel attributes the October 2017 release to clarifier partial plugging; that is "heavier solids built up on one side of the Lamella® [an inclined plate gravity settler], and as a result there was excess solids carryover on that side of the clarifier." Thus, it appears the failure did not occur due to the upstream chemical reduction and precipitation steps but instead, handling of the solids produced. Accordingly, the Consent Decree should require a review of the sizing, and past and future operation of the treatment process. Such a review should include establishing that the clarifiers are adequately sized, that the sludge withdrawal rate is also adequate, that plate cleaning is regularly scheduled to prevent partial plugging and channelization (which would cause TSS carryover) and an assessment of whether additional effluent filtration is required.

5. Monitoring of WWTP: U. S. Steel's January 4, 2018 letter also mentions that additional turbidimeters were installed in the clarifier effluent channels. The Consent Decree should include a requirement to operate and maintain these units for the life of the Midwest Plant (or for the duration of operations that require an NPDES permit).

6. Wastewater Staffing Adequacy: U. S. Steel should be required by the Consent Decree to perform a review of current treatment plant staff relative to their education, training and licensing requirements for the position. A plan should be developed to further train staff or reassign them based on the results of the review.

7. Sampling for Hexavalent Chromium during Incidents: The January 4, 2018 letter also states that sampling was not performed for hexavalent chromium after the October 2017

incident because "all operational data and parameters associated with the chrome treatment plant indicated there were no issues associated with the reduction and precipitation process that converts dissolved hexavalent chromium to trivalent chromium solids." Instead, the Midwest Plant relied on the 24-hour composite sampler to provide an indication of the quantity of total chromium released during the spill. Sampling for hexavalent chromium is done by grab sample because the analysis method stipulates a short hold time.

The proposed Consent Decree (Item 12) currently includes a requirement for daily monitoring of total chromium and hexavalent chromium (in addition, the current NDPES permit requires collection of five weekly samples for total chromium but weekly monitoring for hexavalent chromium). While this increased frequency is helpful, it may not capture the concentrations in a release, nor does the proposed Consent Decree require this frequency of sampling in perpetuity as it allows U. S. Steel to request a reduced frequency when it renews the Midwest Plant's NPDES permit.

Therefore, the Consent Decree should require that any future spills (unauthorized releases) include a protocol to immediately collect and analyze a sample for hexavalent chromium to provide confidence in the Midwest Plant's processes. This will require that the equipment needed to analyze the sample be readily available or that a device be included in the process that can either automatically collect a sample at the time of an alarm in the process control system or be manually triggered by an operator. This type of sample allows for real-time collection of the process water that triggered the concern, allowing for better analysis of the cause of the incident (and thus appropriate process remedies) and a reduction in the potential for risk to the environment.

8. The Need for a Comprehensive Engineering Audit of the Facility In Light of U. S. Steel's Poor Maintenance and Repair Practices

The picture that emerges from the totality of comments above is of a facility that is poorly maintained. A piecemeal approach to requiring U. S. Steel to bring its facility into compliance, in light of its past and ongoing violations and its obviously poor maintenance and repair practices, provides no comfort or confidence that the potential for future violations has been minimized. To provide the level of protection that Lake Michigan and the millions of people relying on it deserve, and the law requires, the Consent Decree should require that a comprehensive approach to compliance be undertaken by U. S. Steel, by requiring the following actions.

a. Require U. S. Steel to conduct a comprehensive engineering review of chemical storage areas, production areas and conveyances (e.g.) pipes with regard to condition, risk of leak, leak detection, and consequences of a leak/spill (*i.e.,* where the release would go). The evaluator should also review the O&M Plan (including the external references listed but not actually available for review in U. S. Steel's earlier submittal) for adequacy, and then examine the treatment facilities for adequacy of their capacity, process, equipment, instrumentation, and record keeping. Recommendations should be prioritized and shared for review, with a mutually acceptable compliance schedule to implement the changes identified by the review.

b. Provide documentation of actions taken and repairs or changes in operations that have been or will be made in response to the April and October 2017 spills, as well as the January 2018 incident, including associated costs. All future actions to be taken should include a schedule for initiation and completion.

c. Retain an independent third-party inspector, acceptable to all parties to the Consent Decree, to review the current condition of the Midwest Plant and operational practices related to plant process and wastewater treatment schemes that handle chromium or hexavalent chromium. U. S. Steel should be required to implement the inspector's recommendations.

d. Provide a report on the uses of chromium and hexavalent chromium at the Midwest Plant and include an evaluation of the feasibility to utilize alternative chemicals with lower toxicity and adverse environmental effects, and if any chemical substitutes exist, include a schedule for implementing use of replacement chemicals.

e. Provide complete records from the previous five years on the capital improvement and O&M expenditures at the Midwest Plant related to the product line and infrastructure where chromium or hexavalent chromium are used or produced. Include any condition assessment reports and maintenance request logs for the same infrastructure.

f. Provide a report on the licensing requirements for operating the industrial wastewater treatment facility, and a review of the education, training, and license status of current operators. Provide a plan for ongoing training of these staff in spill prevention and handling.

g. Hire a third-party independent engineer to prepare a report for improvements to the infrastructure handling chromium or hexavalent chromium that would evaluate opportunities to provide secondary containment of infrastructure as an approach to spill prevention.

h. Hire a third-party independent engineer or other appropriate specialist to prepare a report on available real-time sensors that can detect a change in effluent and/or Burns Waterway water quality that would indicate a potential spill for all outfalls that discharge toxic parameters. Implement the sensor program, establish a maintenance plan for the sensors, and tie them into the Midwest Plant's SCADA system with alarms.

9. The Need for Environmental Investigations

The April 2017 spill has left two potential areas of contamination for which the City has no information about possible investigations or remediation measures. The Consent Decree should require that U. S. Steel undertake the following actions:

a. Failed Secondary Containment Trench – It is likely that product from the failed expansion joint/containment trench has entered the underlying soils, and possibly the groundwater. Under the direction of a licensed site professional or remediation engineer (or the equivalent specialist properly licensed in Indiana), U. S. Steel should undertake a sampling program to characterize the existence and extent of chromium contamination (and any another other potential contaminant in the fluid that leaked) in the soils and groundwater where the spill occurred or any downgradient location where it could have travelled (such as along the outside of the bottom of the secondary containment trench). If contamination is found, a risk assessment to workers and the environment should be conducted and a remedy to appropriate levels should be required.

b. Discharge to the Burns Waterway – The April 2017 spill resulted in a large amount of chromium being discharged to the Burns Waterway.

It is possible that some of that chromium is now found in the sediments in the waterway. U. S. Steel should conduct a progressive sampling program initially including the point of discharge to Lake Michigan examining for elevated levels of chromium. A risk assessment to aquatic life should be performed on the results and if necessary remediation should be undertaken. If concentrations in the Burns Waterway are problematic, then sampling should continue into Lake Michigan both along shore and offshore, progressively until the risk is abated.

II. THE CONSENT DECREE'S CIVIL PENALTY IS INSUFFICIENT TO ACCOUNT FOR THE NUMBER, DURATION, AND SERIOUSNESS OF THE VIOLATIONS OR TO DETER FUTURE SUCH VIOLATIONS

In this action, the United States and the State of Indiana allege that U. S. Steel committed over 75 violations of the CWA and its CWA NPDES permit. In the City's Complaint in its pending CWA citizen suit, the City raised numerous, similar allegations. Although U. S. Steel has not filed an Answer in this Consent Decree action, it filed an Answer in the City's CWA citizen suit, admitting multiple violations of the CWA and its NPDES permits. *See* attached Answer. For example, in response to the City's allegations at p.22, par. 50 of the attached Answer, U. S. Steel stated, "U. S. Steel admits that prior to the April 11, 2017 chromium spill, the Midwest Plant had violated the chromium discharge limits in its NPDES Permit on February 3, 2013 and January 12, 2017 and had reported those violations. U. S. Steel denies the remaining allegations in Paragraph 50. U. S. Steel denies the characterization of 'illegal discharge of chromium.'" *See* Answer at p.23.

In response to the City's allegations at p.31, par. 72, U. S. Steel stated, "U. S. Steel admits that the DMRs show exceedances of the: (i) daily maximum quantity limit for total recoverable chromium on February 3, 2013, April 10, 2017, April 11, 2017, and October 25, 2017; and (ii) the monthly average rate for total recoverable chromium in April 2017. ..."

In response to the City's allegations at p.33, par. 76, U.S. Steel stated, "U. S. Steel admits that it violated the (i) daily maximum limit for hexavalent chromium on January 12, 2017, April 11, 2017, and April 12, 2017; and (ii) monthly average rate for hexavalent chromium

All in all, as a review of the Answer will reveal, U. S. Steel has made numerous admissions regarding CWA and NPDES permit violations. Even taking into consideration only the violations that U.S. Steel has admitted in the City's suit, it is clear that the size of the penalty assessed in the proposed Consent Decree is inadequate and must be increased in any final Consent Decree. In addition, the City notes its support of National Parks Conservation Association's ("NPCA") comprehensive and persuasive discussion in its submitted Comment on the inadequacy of the proposed civil penalty, both under EPA's own CWA Penalty Policy and when examined in light of CWA statutory deterrent purposes. *See* NPCA Comments on Proposed Consent Decree at 11-23 (June 4, 2018).

III. THE CONSENT DECREE MUST ALSO INCLUDE A SUPPLEMENTAL ENVIRONMENTAL PROJECT THAT FURTHERS RESTORATION OF LOCAL NATURAL RESOURCES

Finally, although the City has focused its comments on the proposed Consent Decree's technical compliance and operational injunctive relief, the City also strongly supports requiring U. S. Steel to undertake a Supplemental Environmental Project ("SEP"). Even in light of recent changes to DOJ guidance that narrows the universe of acceptable SEP requirements, there is ample opportunity here to modify the Consent Decree to include a common-sense, beneficial SEP. The City supports consideration of a SEP that aids development of a more comprehensive monitoring and notification system, designed to alert key stakeholders, such as public drinking water sources, state and national parks personnel, and others, automatically when a discharge incident has occurred at the Midwest Plant and to provide information regarding flow migration

of contaminants.[9] Such a SEP could serve as a pilot project at the Midwest Plant facility, allowing for proof of a concept that could eventually be deployed in the long-term at other industrial facilities with potential to discharge pollutants into Lake Michigan. While the City supports consideration of a notification and monitoring SEP, the City is also open to inclusion of other SEP concepts proposed by EPA, IDEM, U. S. Steel itself or other stakeholders participating in the public comment process. The City requests that EPA and IDEM convene informal discussions among parties to this action as well as other stakeholders to receive additional feedback regarding possible appropriate SEPs.

IV. CONCLUSION

In the forgoing comments, the City has requested a series of modifications and additions to the proposed Consent Decree with one primary goal in mind: utilizing this opportunity to take all reasonable, feasible measures to ensure that the Midwest Plant is operated in compliance with the CWA and has minimized the likelihood of dangerous incidents such as those that occurred in April and October 2017. Thus, the City request consideration of its comments and modification of the proposed Consent Decree in order to achieve that goal. In addition, the City requests that, if the proposed Consent Decree is submitted to the Court as it currently stands, DOJ submit the City's comments to the Court for consideration in its review of the proposed Consent Decree.

[9] *See, e.g.*, Delaware Valley Early Warning System, http://www.exchangenetwork.net/EN2015_files/9.3.pdf.

Respectfully submitted,

CITY OF CHICAGO

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By: _____

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF INDIANA
HAMMOND DIVISION

THE CITY OF CHICAGO, Plaintiff, v. UNITED STATES STEEL CORPORATION, Defendant.	)	Civil Action No. 2:18-cv-00020

UNITED STATES STEEL CORPORATION'S ANSWER AND AFFIRMATIVE DEFENSES TO PLAINTIFF'S COMPLAINT

Defendant United States Steel Corporation ("U. S. Steel"), by counsel, for its Answer to the Complaint filed by Plaintiff The City of Chicago (the "City"), states as follows:

NATURE OF THE ACTION

1. This action seeks to uphold the objective of CWA, to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Specifically, the City aims to restore and maintain Lake Michigan, which U.S. Steel has harmed and continues to harm through repeated and significant violations of its CWA permit limitations and maintenance failures. These harmful and illegal acts include, but are not limited to, multiple excessive discharges of toxic chemicals into the body of water that supplies the City's two water treatment plants, which serve as the source of drinking water for over 5 million people, over 40% of the population of the State of Illinois. U.S. Steel has repeatedly evaded responsibility for violating the CWA, and state and federal regulators have failed to enforce the law adequately. The City seeks to hold U.S. Steel responsible for the injuries it has caused to Lake Michigan and the adverse impacts upon the City's interest in being able to provide

drinking water to over 5 million people in Chicago and surrounding suburbs, uncontaminated by U.S. Steel's illegal discharges of pollutants into Lake Michigan. In addition, the City seeks to protect its crucial interests in Lake Michigan, a vital economic engine for the City, a beloved source of recreation and tourism for the City's residents and guests, and the City's aesthetic heart and soul.

ANSWER: United States Steel Corporation's correct shortened name as reflected in its corporate registration documents is "U. S. Steel" (including spaces). U. S. Steel lacks knowledge sufficient to form a belief regarding the truth of the City's allegations concerning its purpose in filing this lawsuit and, therefore, denies same. U. S. Steel denies all remaining allegations contained in Paragraph 1.

2. This is a civil action for injunctive relief and civil penalties, brought under Section 505 of the CWA, 33 U.S.C. § 1365, against U.S. Steel for the discharge of pollutants in violation of Section 301 of the CWA, 33 U.S.C. § 1311, and in violation of the National Pollutant Discharge Elimination System ("NPDES") permits issued to U.S. Steel pursuant to Section 402 of the CWA, 33 U.S.C. § 1342. As a result, and as further alleged herein, U.S. Steel has violated the terms and conditions of its NPDES permits and has violated Sections 301(a) and 402(a) of the CWA, 33 U.S.C. §§ 1311(a), 1342(a).

ANSWER: Paragraph 2 states legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies this Paragraph. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied.

3. The City seeks a declaratory judgment, injunctive relief, the imposition of civil penalties, damages, and the award of costs, including attorney and expert witness fees.

ANSWER: Paragraph 3 states legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies this Paragraph. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied.

THE PARTIES

4. Plaintiff, the City is an Illinois municipal corporation and home rule unit of local government organized and existing under Article VII of the Constitution of the State of Illinois and the laws of Illinois, located in Cook County, Illinois.

ANSWER: U. S. Steel lacks knowledge sufficient to form a belief regarding the City's corporate or municipal organization as described in Paragraph 4.

5. Defendant, U.S. Steel is a corporation registered in the state of Delaware with its principal place of business in Pittsburgh, Pennsylvania.

ANSWER: United States Steel Corporation's correct shortened name as reflected in its corporate registration documents is "U. S. Steel" (including spaces). U. S. Steel admits that it is a corporation registered in the state of Delaware with its principal place of business in Pittsburgh, Pennsylvania.

JURISDICTION AND VENUE

6. This Court has jurisdiction over the subject matter of this action pursuant to Section 505(a) of the CWA, 33 U.S.C. § 1365(a)(1), and pursuant to federal question jurisdiction under 28 U.S.C. § 1331. This Court also has supplemental jurisdiction under 28 U.S.C. § 1367 with regard to the Sixth Claim For Relief (Negligence).

ANSWER: Paragraph 6 states legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies this Paragraph. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied.

7. The relief requested is authorized pursuant to Sections 309 and 505(a) of the CWA, 33 U.S.C. §§ 1319 and 1365(a), and 28 U.S.C. §§ 2201 and 2202.

ANSWER: Paragraph 7 states legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies this Paragraph. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied.

8. In compliance with Section 505(b)(1)(A) of the CWA, 33 U.S.C. § 1365(b)(1)(A), on November 20, 2017, the City gave notice of the violations specified in this Complaint and of the City's intent to file suit to U.S. Steel, the Administrator of the United States Environmental Protection Agency ("USEPA"), the Regional Administrator of USEPA, the United States Attorney General, the Indiana Department of Environmental Management ("IDEM"), and the Attorney General for the State of Indiana. The City's notice letter meets the requirements of 40 C.F.R. § 135.1 *et seq.* and provided U.S. Steel with notice of the CWA violations in this Complaint. A copy of the City's notice letter is attached hereto as **Exhibit A**.

ANSWER: U. S. Steel admits that the City provided U. S. Steel with the notice letter attached as Exhibit A to the Complaint. U. S. Steel lacks knowledge sufficient to form a belief regarding the City's notice to the Administrator of the United States Environmental Protection Agency ("USEPA"), the Regional Administrator of USEPA, the United States Attorney General, the Indiana Department of Environmental Management ("IDEM"), and the Attorney General for

the State of Indiana, but admits that they are shown as copied parties on Exhibit A. The remaining allegations in this Paragraph constitute legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that the remaining allegations in this Paragraph are deemed to be factual matters, they are denied.

9. More than sixty days have passed since the City's notice was served, and the violations complained of in the notice letter are continuing at this time or are reasonably likely to continue. U.S. Steel therefore remains in violation of its NPDES permit and the CWA.

ANSWER: U. S. Steel admits that the City provided the notice attached as Exhibit A to the Complaint more than sixty days before the filing of its Complaint. U. S. Steel denies the remaining allegations contained in Paragraph 9.

10. Venue is proper in this District pursuant to Section 505(c)(1) of the CWA, 33 U.S.C. § 1365(c)(1), and pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the U.S. Steel facility at issue is located in this District and the causes of the action alleged in this Complaint arose in this District.

ANSWER: U. S. Steel admits that venue is proper.

STATUTORY AND REGULATORY BACKGROUND

a. The CWA's Citizen Suit Provisions

11. The City and U.S. Steel are "persons" pursuant to Section 502 of the CWA, 33 U.S.C. § 1362(5), which defines "person" as "an individual, corporation, partnership,

association, State, municipality, commission, or political subdivision of a State, or any interstate body."

ANSWER: U. S. Steel admits that Section 502 of the CWA, 33 U.S.C. § 1362(5) defines "person" as "an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body." The remaining allegations contained in Paragraph 11 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any remaining allegations in this Paragraph are deemed to be factual matters, they are denied. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

12. The City is a "citizen" pursuant to Section 505 of the CWA, 33 U.S.C. §§ 1365(a) and 1365(g), because it is a "person[] having an interest which is or may be adversely affected" by U.S. Steel's illegal discharges.

ANSWER: U. S. Steel admits that Section 505 of the CWA, 33 U.S.C. §§ 1365(a) and 1365(g), defines "citizen" as a "person[] having an interest which is or may be adversely affected." U. S. Steel denies the characterization of "illegal discharges." U. S. Steel lacks knowledge sufficient to form a belief regarding the truth of Plaintiff's remaining allegations and, therefore, denies same. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

13. U.S. Steel may be sued pursuant to Section 505 of the CWA, 33 U.S.C. § 1365(a), which authorizes any citizen to "commence a civil action . . . against any person . . . who is

alleged to be in violation of an effluent standard or limitation." "[T]he term 'effluent standard or limitation'" includes "a permit or condition thereof issued under section 1342 of this title." 33 U.S.C. § 1365(f).

ANSWER: U. S. Steel admits that Section 505 of the CWA, 33 U.S.C. § 1365(a), authorizes a "citizen" to "commence a civil action . . . against any person . . . who is alleged to be in violation of an effluent standard or limitation." U. S. Steel admits that the following quotation derives from 33 U.S.C. § 1365(f): "[T]he term 'effluent standard or limitation'" includes "a Permit or condition thereof issued under section 1342 of this title." The remaining allegations contained in Paragraph 13 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any remaining allegations in this Paragraph are deemed to be factual matters, they are denied. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

b. The CWA's NPDES Program

14. The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a).

ANSWER: U. S. Steel admits that 33 U.S.C. § 1251(a) states that the Congressional objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

15. Section 101(a)(3) of the CWA prohibits "the discharge of toxic pollutants in toxic amounts." 33 U.S.C. § 1251(a)(3).

ANSWER: U. S. Steel denies the accuracy of the Plaintiff's paraphrasing of Section 101(a)(3), 33 U.S.C. § 1251(a)(3), in Paragraph 15. U. S. Steel admits that Section 101(a)(3) of the CWA states as follows: "it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

16. Section 301 of the CWA, 33 U.S.C. § 1311(a), prohibits the "discharge of any pollutant by any person" into navigable waters except in compliance with a NPDES permit issued by the USEPA or an authorized state administrator pursuant to Section 402 of the CWA, 33 U.S.C. § 1342.

ANSWER: U. S. Steel admits that Section 301 of the CWA, 33 U.S.C. § 1311(a), prohibits the "discharge of any pollutant by any person" into navigable waters except in compliance with a NPDES permit issued by the USEPA or an authorized state administrator pursuant to Section 402 of the CWA, 33 U.S.C. § 1342. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

17. At all times relevant to this Complaint, IDEM has been and continues to be authorized by the USEPA to implement the NPDES permit program for discharges into navigable waters within its jurisdiction pursuant to 40 C.F.R. § 123.1.

ANSWER: U. S. Steel admits that IDEM is authorized by USEPA to administer the NPDES permit program for discharges into navigable waters within its jurisdiction pursuant to 40 C.F.R. § 123.1.

18. Section 502 of the CWA defines "navigable waters" as "waters of the United States." 33 U.S.C. § 1362(7).

ANSWER: U. S. Steel admits that Section 502 of the CWA defines "navigable waters" as "waters of the United States." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

19. Under Section 502 of the CWA, the term "discharge of a pollutant" includes "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1362(12).

ANSWER: U. S. Steel admits that under Section 502 of the CWA, the term "discharge of a pollutant" includes "any addition of any pollutant to navigable waters from any point source." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

20. Section 502 of the CWA defines "pollutant" as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." 33 U.S.C. § 1362(6).

ANSWER: U. S. Steel admits that Section 502 of the CWA defines "pollutant" as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged

into water." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

21. Section 502 of the CWA defines "point source" as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).

ANSWER: U. S. Steel admits that Section 502 of the CWA defines "point source" as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

22. Section 402 of the CWA, 33 U.S.C. § 1342(a), provides that a permit-issuing authority may "issue a [NPDES] permit for the discharge of any pollutant" into navigable waters of the United States, but only in compliance with the applicable requirements of Section 301 of the CWA, 33 U.S.C. § 1311, and such other conditions as the permit-issuing authority determines are necessary to carry out the provisions of the CWA.

ANSWER: U. S. Steel denies the accuracy of the Plaintiff's paraphrasing of Section 402 of the CWA, 33 U.S.C. § 1342(a), in Paragraph 22. U. S. Steel admits that Section 402(a) provides in part, "the Administrator may, after opportunity for public hearing issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 1311(a) of

this title, upon condition that such discharge will meet either (A) all applicable requirements under sections 1311, 1312, 1316, 1317, 1318, and 1343 of this title, or (B) prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this chapter." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

23. NPDES permits establish "effluent limitations," which are defined as "any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters." 33 U.S.C. § 1362(11).

ANSWER: U. S. Steel admits that NPDES permits establish "effluent limitations," which the CWA defines as "any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

24. Section 308 of the CWA, 33 U.S.C. § 1318, requires NPDES permittees to establish and maintain records; to install, use and maintain monitoring equipment; to sample effluents; and to "make such reports" as required in the permit regarding permittees' pollutant discharges.

ANSWER: U. S. Steel admits that Section 308 of the CWA gives EPA the authority to impose requirements for NPDES permittees relative to reporting and maintenance of records and

monitoring equipment. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

25. Section 402(a)(2) of the CWA, 33 U.S.C. § 1342(a)(2), authorizes the Administrator to "prescribe conditions for [NPDES] permits to assure compliance . . . including conditions on data and information collection, reporting, and such other requirements as he deems appropriate."

ANSWER: U. S. Steel admits that Section 402(a)(2) of the CWA, 33 U.S.C. § 1342(a)(2), authorizes the Administrator to "prescribe conditions for [NPDES] permits to assure compliance . . . including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

26. Failure to comply with any condition of a permit is a violation of Section 301 of the CWA, 33 U.S.C. § 1311, and is actionable under Section 505 of the CWA, 33 U.S.C. § 1365(a)(1).

ANSWER: U. S. Steel admits that failure to comply with any condition of a permit may be a violation of Section 301 and may give rise to an action under Section 505. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

c. Judicial Relief in CWA Suits

27. Section 505 of the CWA authorizes the district courts "to enforce such an effluent standard or limitation . . . and to apply any appropriate civil penalties under section 1319(d)" in suits filed by citizens pursuant to 33 U.S.C. § 1365(a).

ANSWER: U. S. Steel admits that Section 505 of the CWA authorizes the district courts "to enforce such an effluent standard or limitation . . . and to apply any appropriate civil penalties under section 1319(d). . . ." in suits filed by citizens under Section 505. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

28. Section 309 of the CWA, 33 U.S.C. § 1319(d), provides that "any person" who violates Section 301 of the CWA, 33 U.S.C. § 1311, or violates any permit condition or limitation in an NPDES permit issued pursuant to Section 402 of the CWA, 33 U.S.C. § 1342, "shall be subject to a civil penalty."

ANSWER: U. S. Steel admits that Section 309 of the CWA, 33 U.S.C. § 1319(d), provides that "any person" who violates Section 301 of the CWA, 33 U.S.C. § 1311, or violates any permit condition or limitation in an NPDES permit issued pursuant to Section 402 of the CWA, 33 U.S.C. § 1342, "shall be subject to a civil penalty." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

29. Each exceedance of a daily effluent limitation shall be treated as a distinct violation, and each exceedance of a monthly average limit shall be treated as a violation for every day in the month in which the violation occurred.

ANSWER: U. S. Steel states that the Plaintiff's unspecific, broad, and generalized references in Paragraph 29 are vague and, therefore, denies same.

30. Each separate violation of the CWA subjects the violator to a penalty of up to $37,500 per day per violation for all violations occurring from January 12, 2009 through November 2, 2015, and up to $52,414 per day for all violations that occurred after November 2, 2015, pursuant to Sections 309(d) and 505(a) of the CWA, 33 U.S.C. §§ 1319(d), 1365(a), and 40 C.F.R. §§ 19.1-19.4. *See also* 28 U.S.C. § 2461, 31 U.S.C. § 301.

ANSWER: U. S. Steel denies the CWA subjects violators to penalties up to the amounts stated in Paragraph 30. U. S. Steel further states that the CWA and other cited statutes speak for themselves and are the best evidence of the cited excerpts and context thereof.

31. Under the citizen suit provision of the CWA, Section 505, the court may also award "costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party." 33 U.S.C. § 1365(d).

ANSWER: U. S. Steel admits that Section 505 of the CWA states in part, "The court, in issuing any final order in any action brought pursuant to this section, may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party, whenever the court determines such award is appropriate." To the extent that this paragraph infers that U. S. Steel is obligated to pay such costs of this litigation, the same is denied. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

GENERAL ALLEGATIONS

32. The City owns and operates two of the world's largest conventional water treatment plants with a combined capacity of 2,100 million gallons per day. These two plants, operated by the City's Department of Water Management ("DWM"), serve the City's citizens, schools, health care facilities, food establishments and other businesses, as well as 125 surrounding Illinois communities. In total, the City provides drinking water to over 5 million people or over 40% of the population of Illinois.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the truth of the allegations contained in Paragraph 32 and, therefore, denies same.

33. Lake Michigan is the sole source of the water, which DWM, in accordance with state and federal drinking water laws and regulations, supplies for ultimate use and consumption by its citizens and other customers through conventional water treatment processes and a network of water mains and pipes consisting of approximately 4,400 miles in total.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the truth of the allegations contained in Paragraph 33 and, therefore, denies same.

34. At all times relevant to this Complaint, U.S. Steel has owned and operated a steel refinery known as the United States Steel Corporation, Gary Works – Midwest Plant at 6300 U.S. Highway 12, Portage, IN 46368 ("Midwest Plant"), which is located in Porter County.

ANSWER: U. S. Steel admits that it owns a steel finishing facility known as the Midwest Plant located at 6300 U.S. Route 12, in Portage, Indiana 46368.

35. The Midwest Plant is located on Burns Waterway, a small industrial ditch, into which the facility discharges both wastewater and stormwater, and which empties directly into Lake Michigan. U.S. Steel is responsible for processing its wastewater in accordance with the terms of its NPDES permit No. IN0000337.

ANSWER: U. S. Steel admits that, subject to the terms and conditions of its 2016 NPDES Permit IN0000337, the Midwest Plant discharges wastewater and stormwater through three outfalls into Burns Waterway. U. S. Steel denies any remaining allegations contained in Paragraph 35.

36. U.S. Steel discharges wastewater into Burns Waterway a few hundred feet from where waters flowing from Burns Waterway enter Lake Michigan.

ANSWER: U. S. Steel admits that, subject to the terms and conditions of its 2016 NPDES Permit, the Midwest Plant discharges wastewater and stormwater through three outfalls into Burns Waterway, which is connected to Lake Michigan. U. S. Steel states that the phrase "a few hundred feet from where waters flowing from Burns Waterway enter Lake Michigan" is vague and, therefore, denies same.

37. U.S. Steel has repeatedly violated pollutant-discharge and maintenance provisions in its permit during the past five years.

ANSWER: Beyond those violations specifically admitted herein, U. S. Steel denies the allegations contained in Paragraph 37.

a. The April 2017 Illegal Discharge

38. In April 2017, a broken pipe or pipes and a corroded collection trough or troughs resulted in a spill, reported by U.S. Steel as consisting of approximately 350 pounds of total chromium, of which nearly 300 pounds was carcinogenic hexavalent chromium.

ANSWER: U. S. Steel admits that an expansion joint in a pipe carrying chromium-containing wastewater to the Midwest Plant's Chrome Treatment Plant broke causing chromium wastewater to enter the plant's North Treatment Plant and be subsequently discharged to Burns Waterway through Outfall 004 via Bubble Outfall 304 between April 11, 2017 and April 12, 2017. Final sampling results indicated that approximately 351 pounds of total chromium was released during this event, of which 298 pounds was comprised of hexavalent chromium. EPA's own water testing showed no hexavalent chromium impacts to the Burns Waterway or Lake Michigan. All results from water samples taken after the day of the release showed hexavalent chromium below EPA's method detection limit of 1 part per billion.

39. According to public reports, this spill began on April 10, 2017 and continued into April 11, 2017. Under USEPA oversight, U.S. Steel collected water samples on April 11th that showed levels of hexavalent chromium that were (i) hundreds of times greater than standards set to be protective of human health in Burns Waterway and (ii) more than double those standards at the point where Burns Waterway flows into Lake Michigan. Nonetheless, it appears that no samples were collected in Lake Michigan itself until April 12, 2017.

ANSWER: U. S. Steel states that the phrase "[a]ccording to public reports" as well as Plaintiff's characterizations of "hundreds of times greater" and "more than double" are vague and, therefore, denies same. U. S. Steel further states that an expansion joint in a pipe carrying

chromium-containing wastewater to the Midwest Plant's Chrome Treatment Plant broke causing chromium wastewater to enter the plant's North Treatment Plant and be subsequently discharged to Burns Waterway through Outfall 004 via Bubble Outfall 304 between April 11, 2017 and April 12, 2017. Final sampling results indicated that approximately 351 pounds of total chromium was released during this event, of which 298 pounds was comprised of hexavalent chromium. EPA's own water testing showed no hexavalent chromium impacts to the Burns Waterway or Lake Michigan. All results from water samples taken after the day of the release showed hexavalent chromium below EPA's method detection limit of 1 part per billion. U. S. Steel denies the remaining allegations in Paragraph 39.

40. According to IDEM reports, U.S. Steel failed to notify any downstream users of the waters affected by the April 2017 chromium spill.

ANSWER: U. S. Steel states that the phrase "[a]ccording to IDEM reports" is vague and, therefore, denies same. U. S. Steel states that when a discoloration at Bubble Outfall 304 was noticed at the Midwest Plant on April 11, 2017, it was reported by telephone to the National Response Center (Report #1175399), the U.S. Coast Guard, and the Local Emergency Planning Committee ("LEPC") beginning at 9:30 a.m. EPA began emergency response procedures at that time, followed shortly thereafter by IDEM, National Park Service ("NPS") and National Oceanic and Atmospheric Administration ("NOAA"). From April 11, 2017 to April 18, 2017, EPA, IDEM, NOAA and NPS responded to oversee U. S. Steel's in-stream monitoring of Burns Waterway, Lake Michigan, local Indiana beaches and the public drinking water intake of Indiana American Water. IDEM notified downstream users and EPA collected samples during this timeframe. A total of four local beaches and the Indiana American Water public drinking water

intake were closed due to the April 11, 2017 spill. EPA's own water testing showed no hexavalent chromium impacts to the Burns Waterway or Lake Michigan. All results from water samples taken after the day of the release showed hexavalent chromium below EPA's method detection limit of 1 part per billion. U. S. Steel admits that an IDEM inspection report, dated June 2, 2017, rated U. S. Steel's "spill notification" as "unsatisfactory" in part because "downstream users were notified by David Greinke with IDEM - Emergency Response, rather than US Steel [sic] personnel."

41. In response to U.S. Steel's April 2017 chromium spill, numerous public beaches were closed for several days, including the Portage Lakefront and the Indiana Dunes National Lakeshore.

ANSWER: U. S. Steel states that a total of four local beaches, including the Portage Lakefront and the Indiana Dunes National Lakeshore, were temporarily closed due to the April 11, 2017 spill. EPA's own water testing showed no hexavalent chromium impacts to the Burns Waterway or Lake Michigan. All results from water samples taken after the day of the release showed hexavalent chromium below EPA's method detection limit of 1 part per billion.

42. Additionally, the public drinking water intake of Indiana American Water, serving the City of Portage, ceased drawing Lake Michigan water and remained shut down for nearly a week.

ANSWER: U. S. Steel admits that the Indiana American Water intake at Ogden Dunes was closed from April 11, 2017 to April 18, 2017. U. S. Steel further states that EPA's own water testing showed no hexavalent chromium impacts to the Burns Waterway or Lake

Michigan. All results from water samples taken after the day of the release showed hexavalent chromium below EPA's method detection limit of 1 part per billion. U. S. Steel lacks information sufficient to form a belief regarding the truth of the remaining allegations contained in Paragraph 42 and, therefore, denies same.

43. On the afternoon of Tuesday April 11, 2017, the City received notification from Illinois EPA of a hexavalent chromium spill into Lake Michigan from the U.S. Steel's plant in Portage, Indiana. Chromium and its components is a toxic pollutant under Section 307(a) of the CWA, 33 U.S.C. § 1317(a). 40 C.F.R. § 401.15.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding what notifications the City received from Illinois EPA and, therefore, denies same. U. S. Steel admits that the Federal Register lists "chromium and compounds" as a toxic pollutant pursuant to Section 307(a)(1) of the CWA.

44. Later that afternoon, DWM staff was mobilized for the purpose of implementing a plan of action to assess the threat posed by U.S. Steel's illegal discharge of hexavalent chromium to the City's Lake Michigan drinking water source and to DWM's water intake cribs nearest to the U.S. Steel plant in Portage, Indiana. The action plan called for: (i) every two hours sampling of the Eugene Sawyer Water Purification Plant ("SWPP") water intake crib, located approximately 20 miles west north west of the point where the Burns Waterway enters Lake Michigan, to identify any increase in hexavalent chromium levels at the crib; and (ii) initiation of a hexavalent chromium sampling survey of Lake Michigan water in the area

between the mouth of the Burns Waterway and DWM's SWPP crib in order to track the direction, speed, and size of any advancing plume of hexavalent chromium contaminated water.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 44 and, therefore, denies same. U. S. Steel denies the characterization of "illegal discharge of hexavalent chromium."

45. Laboratory results from Lake Michigan water samples collected by the City on April 12, 2017, showed that a plume of hexavalent chromium-contaminated water was migrating in a westerly direction toward the SWPP intake crib at levels well in excess of residual values normally recorded in the Lake by DWM.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 45 and, therefore, denies same.

46. Laboratory results from water samples collected by the City on April 13, 2017, showed that the plume of hexavalent chromium-contaminated water was continuing to migrate further west, advancing toward the SWPP intake crib at levels still well in excess of residual values normally recorded in the Lake by DWM.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 46 and, therefore, denies same.

47. Laboratory results from water samples collected by the City on April 14, 2017, showed that a plume of hexavalent chromium-contaminated water was still continuing to migrate further northwest toward the SWPP intake crib. While levels of hexavalent

chromium were lower than the levels from the previous days' sampling, levels were still well in excess of residual values normally recorded in the Lake by DWM.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 47 and, therefore, denies same.

48. On or around April 15, 2017, the fifth day after U.S. Steel's illegal discharge of hexavalent chromium into Lake Michigan, laboratory results from water samples collected on April 15, 2017 revealed that hexavalent chromium levels had dissipated to residual levels.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 48 and, therefore, denies same. U. S. Steel denies the characterization of "illegal discharge of hexavalent chromium."

49. The costs incurred by the City to sample, analyze, and monitor the potential adverse effects and threat posed by U.S. Steel's illegal hexavalent chromium discharge of April 10 – 11, 2017 were well in excess of $75,000.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 49 and, therefore, denies same. U. S. Steel denies the characterization of "illegal hexavalent chromium discharge."

50. Prior to U.S. Steel's April 2017 illegal discharge of chromium, it had violated the chromium discharge limits set in its NPDES permit on at least two separate occasions in the preceding five years, including in January 2017.

ANSWER: U. S. Steel admits that prior to the April 11, 2017 chromium spill, the Midwest Plant had violated the chromium discharge limits in its NPDES Permit on February 3, 2013 and January 12, 2017 and had reported those violations. U. S. Steel denies the remaining allegations in Paragraph 50. U. S. Steel denies the characterization of "illegal discharge of chromium."

b. The October 2017 Illegal Discharge

51. Sometime in October, 2017, on a date best known by U.S. Steel, U.S. Steel again illegally discharged an excessive amount of chromium. Despite a third-party contractor working for U.S. Steel observing a blue discharge with visible solids, U.S. Steel did not test to see how much of the total chromium discharged was comprised of the more toxic hexavalent chromium.

ANSWER: U. S. Steel admits that the Midwest Plant violated the chromium discharge limits in its NPDES Permit on October 25, 2017, and denies the characterization of "illegally discharged." U. S. Steel further states that it conducted sampling once per week for hexavalent chromium and sampling five times per week for total chromium in accordance with its NPDES Permit terms. U. S. Steel denies the remaining allegations contained in Paragraph 51.

52. U.S. Steel did not notify anyone who might or actually did use Lake Michigan for recreation, drinking water, or other purposes of its October 2017 illegal chromium discharge. Instead, U.S. Steel notified only IDEM, and the company's written report requested that IDEM treat as confidential the information about the October 2017 discharge.

ANSWER: U. S. Steel admits that in accordance with its 2016 Permit, it notified IDEM of the October 2017 chromium release. U. S. Steel denies the characterization of "illegal chromium discharge." U. S. Steel further states that on November 6, 2017, it subsequently withdrew its request to treat as confidential the information regarding the October 2017 discharge. U. S. Steel denies the remaining allegations contained in Paragraph 52.

53. IDEM did not conduct an accident inspection related to the October 2017 incident until approximately three weeks later, on November 16.

ANSWER: U. S. Steel admits that, in accordance with its Permit, IDEM conducted an inspection of the Midwest Plant on November 16-17, 2017. U. S. Steel lacks knowledge sufficient to form a belief regarding the truth of Plaintiff's remaining allegations and, therefore, denies same.

54. According to public reports, neither U.S. Steel nor IDEM officials notified USEPA of the October exceedance. The Chicago Tribune reported that USEPA only learned of the October 2017 incident when a Tribune reporter requested USEPA's comment for an article on U.S. Steel's persistent CWA violations.

ANSWER: U. S. Steel admits that, in accordance with its Permit, it notified IDEM of the October 2017 release. U. S. Steel did not notify USEPA, which reporting is not required by the Permit. U. S. Steel further states that the phrase "[a]ccording to public reports" is vague and, therefore, denies same. U. S. Steel lacks information sufficient to form a belief regarding both whether or not IDEM notified USEPA and USEPA's knowledge relative to the Chicago

Tribune's reporting and as described in Paragraph 54 and, therefore, denies same. U. S. Steel denies the Plaintiff's characterization of "persistent CWA violations."

55. In October, 2017, the City learned from after-the-fact newspaper accounts of this additional illegal chromium discharge into Lake Michigan by US Steel's Midwest Plant. Unlike the illegal discharge of chromium in April, 2017, the City did not receive any notification from U.S. Steel or any regulatory agency concerning the unlawful October chromium discharge.

ANSWER: U. S. Steel admits that, in accordance with its Permit, it notified IDEM of the October 2017 release. U. S. Steel did not notify the City, which reporting is not required by the Permit. U. S. Steel lacks information sufficient to form a belief regarding whether or not a regulatory agency notified the City as described in Paragraph 55 and, therefore, denies same. U. S. Steel further denies the characterization of "illegal chromium discharge."

56. U.S. Steel's failure to report the spill and its failure to notify the public and the City prevented the City from initiating the timely surveillance actions necessary to assess the potential threat posed to the City's drinking water supply by a hazardous chemical and known human carcinogen. U.S. Steel's failure to notify the City of its unlawful chromium discharges poses an unreasonable and unacceptable threat to the City's drinking water source for over 5 million people.

ANSWER: U. S. Steel admits that, in accordance with its Permit, it notified IDEM of the October 2017 release. U. S. Steel did not notify the City, which reporting is not required by the Permit. U. S. Steel denies the remaining allegations contained in Paragraph 56.

57. The City is concerned by the threat to its public drinking source posed by U.S. Steel's illegal discharges. Specifically, U.S. Steel's unlawful discharges of chromium and other pollutants harm water quality in Lake Michigan in the vicinity where the City obtains water for drinking water purposes. U.S. Steel's unlawful discharges have directly and adversely threatened and adversely affected, and continue to threaten and adversely affect, the City's ability to provide safe drinking water to its over 5 million citizens and suburban water purchasers.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the City's concerns or abilities as described in Paragraph 57 and, therefore, denies same. U. S. Steel denies the characterization of "illegal discharges." U. S. Steel denies the remaining allegations contained in Paragraph 57.

58. In addition, the City has a vital interest in maintaining the quality of Lake Michigan for purposes other than drinking water. Hotels and Navy Pier depend on the aesthetic quality of the Lake for guests, tourists, and conventioneers. The City also receives revenues from, among other things, fishing, boating, hotels, restaurants, convention business, beachgoers, all of which would be adversely impacted by illegal discharges into the Lake.

ANSWER: U. S. Steel lacks information sufficient to form a belief regarding the allegations contained in Paragraph 58 and, therefore, denies same.

59. The City also has an interest in when and how the City and the public receive notice of U.S. Steel's illegal discharges. Receiving early and timely notification is imperative to the City's ability to take effective actions to avoid having the City's water intake and distribution system contaminated by U.S. Steel's illegal discharges and to protect public health. U.S. Steel's

failure to provide the City with timely notification of U.S. Steel's illegal discharges and other violations alleged herein pose an unacceptable and continuing risk of harm to the City's ability to provide safe drinking water to its over 5 million citizens and suburban water purchasers.

ANSWER: U. S. Steel denies the allegations contained in Paragraph 59.

60. The adverse effects and threats to the City's use of Lake Michigan as a source of public drinking water for over 5 million people as alleged herein are directly traceable to the failures of U.S. Steel to comply with the terms of its NPDES permit.

ANSWER: U. S. Steel denies the allegations contained in Paragraph 60.

61. The relief requested herein from the Court would serve to restore and maintain the chemical, physical, and biological integrity of Lake Michigan redress the threat to the interests of City in being able utilize the Lake as a source of drinking water for millions of people without being adversely affected by the illegal discharges of U.S. Steel. The Court should enjoin U.S. Steel from further discharges in violation of law, and require U.S. Steel to expeditiously take all actions necessary to control its illegal discharges. In addition, the Court should impose a significant monetary penalty to ensure that U.S. Steel enjoys no economic benefit from the practices that led to these repeated violations and to serve as a meaningful deterrent for a company as large as U.S. Steel. Thereby, U.S. Steel would control its discharges of chromium and other pollutants as required by law, improving the quality of the water used by the City, and addressing concerns about protecting the quality of Lake Michigan water used by the City to provide drinking water to over 5 million people.

ANSWER: U. S. Steel denies the allegations contained in Paragraph 61.

VIOLATIONS OF QUANTITATIVE PERMIT LIMITS

62. NPDES Permit No. IN0000337 places limits on the quantity and concentration of pollutants that U.S. Steel is legally permitted to discharge into Burns Waterway through Outfalls 004, 204, 304, and 500 by setting effluent limitations for Total Recoverable Chromium, Hexavalent Chromium, Whole Effluent Toxicity, Oil and Grease, and Temperature, as well as other pollutants.

ANSWER: U. S. Steel admits the allegations contained in Paragraph 62.

63. One version of NPDES Permit No. IN0000337 was in effect from March 1, 2011 to February 28, 2016 ("2011 permit"). U.S. Steel renewed NPDES permit No. IN0000337 in 2016, which came into effect on April 1, 2016 and will remain in effect until March 31, 2021 ("2016 permit"). The 2011 permit is attached hereto as **Exhibit B**. The 2016 permit is attached hereto as **Exhibit C**. At all times relevant to this Complaint, U.S. Steel's NPDES permit No. IN0000337 remained in effect, and the effluent limitations for the pollutants listed in ¶ 97 remained unchanged.

ANSWER: U. S. Steel states that the phrase "at all times relevant" is vague and, therefore, denies same. U. S. Steel admits that the effluent limitations for chromium, WET, and oil and grease remained the same in the 2011 and 2016 Permits. U. S. Steel denies that the effluent limitations for temperature remained the same in the 2011 and 2016 Permits.

64. NPDES Permit No. IN0000337 describes Outfalls 004, 204, 304, and 500 at the U.S. Steel Midwest Plant, each of which are "point source[s]" within the meaning of Section 502 of the CWA, 33 U.S.C. § 1362(14). These outfalls are "point source[s]" within the meaning of

Section 502 of the CWA because they are pipes from which pollutants are discharged into Burns Waterway.

ANSWER: U. S. Steel admits the allegations contained in Paragraph 64.

65. Pursuant to Part I.C.2 of NPDES permit No. IN0000337, U.S. Steel is required to "submit federal and state discharge monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month . . . no later than the 28th day of the month following each completed monitoring period."

ANSWER: U. S. Steel admits that Part I.C.2 of NPDES Permit No. IN0000337 requires U. S. Steel to "submit federal and state discharge monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month . . . no later than the 28th day of the month following each completed monitoring period." U. S. Steel further states that the Permit speaks for itself and is the best evidence of the cited excerpts and context thereof.

66. Pursuant to Part II.C.6.c of NPDES permit No. IN0000337, U.S. Steel is required to certify upon signing the monthly reports that the information is "to the best of [the signer's] knowledge and belief, true, accurate, and complete."

ANSWER: U. S. Steel admits that NPDES Permit No. IN0000337 requires U. S. Steel to certify upon signing the monthly reports that the information is "to the best of [the signer's] knowledge and belief, true, accurate, and complete." U. S. Steel further states that the Permit speaks for itself and is the best evidence of the cited excerpts and context thereof.

67. U.S. Steel's monthly Discharge Monitoring Reports ("DMRs") report chronic and frequent violations of NPDES permit No. IN0000337. According to DMRs that U.S. Steel filed within the five-year statute of limitations period for CWA claims, and pursuant to USEPA guidance on civil penalties, U.S. Steel has a total of ninety violations of its effluent limitations for Total Recoverable Chromium, Hexavalent Chromium, Whole Effluent Toxicity, Oil and Grease, and Temperature.

ANSWER: U. S. Steel admits that it has self-reported, in DMRs, exceedances of effluent limitations for TRC, Hexavalent Chromium WET, Oil and Grease, and Temperature. U. S. Steel denies the characterization of "chronic and frequent violations" and denies that the DMRs disclose ninety violations. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof.

68. Specifically, U.S. Steel self-reported violations of the following pollutants within the five-year statute-of-limitations period.

ANSWER: U. S. Steel admits that it has self-reported exceedances of effluent limitations in accordance with the terms of its NPDES Permit. U. S. Steel further states that Paragraph 68 contains no additional allegation to which an answer is required.

TOTAL RECOVERALE CHROMIUM

69. Chromium is a "pollutant" as defined by Section 502 of the CWA, 33 U.S.C. § 1362(6).

ANSWER: U. S. Steel admits that chromium is a pollutant as defined by Section 502 of the CWA. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

70. Total chromium includes both trivalent and hexavalent forms of chromium because it can convert between forms under different conditions. Hexavalent chromium, also known as chromium-6, has been linked to cancer in studies.

ANSWER: U. S. Steel admits that total chromium includes trivalent and hexavalent forms of chromium that can convert between forms under different conditions. U. S. Steel admits that hexavalent chromium has been linked to cancer in studies.

71. Both the 2011 permit and the 2016 permit contain a daily maximum quantity limit of 30 pounds per day of total recoverable chromium discharged from Outfall 304. The 2016 permit imposes a monthly average rate of 10 pounds per day of total recoverable chromium discharged from Outfall 304.

ANSWER: U. S. Steel admits that the 2011 Permit and the 2016 Permit contain a daily maximum quantity limit of 30 pounds per day of total recoverable chromium discharged from Outfall 304 and that the 2016 Permit imposes a monthly average rate of 10 pounds per day of total recoverable chromium discharged from Outfall 304. U. S. Steel further states that the Permits speak for themselves and are the best evidence of the cited excerpts and context thereof.

72. According to U.S. Steel's DMRs, U.S. Steel exceeded its (i) daily maximum quantity limit for total recoverable chromium four times within the five-year statute of limitations period and (ii) the monthly average rate for total recoverable chromium one time within the five-year statute of limitations period, for a total of thirty-four days of violation.

ANSWER: U. S. Steel admits that the DMRs show exceedances of the: (i) daily maximum quantity limit for total recoverable chromium on February 3, 2013, April 10, 2017, April 11, 2017, and October 25, 2017; and (ii) the monthly average rate for total recoverable chromium in April 2017. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof. The remaining allegations contained in Paragraph 72 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any remaining allegations in this Paragraph are deemed to be factual matters, they are denied.

HEXAVALENT CHROMIUM

73. Hexavalent chromium is a "pollutant" as defined by Section 502 of the CWA, 33 U.S.C. § 1362(6).

ANSWER: U. S. Steel admits that hexavalent chromium is a "pollutant" as defined by Section 502 of the CWA, 33 U.S.C. § 1362(6). U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

74. [Left blank in Complaint.]

ANSWER: Paragraph 74 contains no allegation to which an answer is required.

75. Both the 2011 permit and the 2016 permit contain a daily maximum quantity limit of 0.51 pounds per day of hexavalent chromium discharged from Outfall 304. The 2016 permit imposes a monthly average rate of 0.17 pounds per day of hexavalent chromium discharged from Outfall 304.

ANSWER: U. S. Steel admits that the 2011 Permit and the 2016 Permit contain a daily maximum quantity limit of 0.51 pounds per day of hexavalent chromium discharged from Outfall 304 and that the 2016 Permit imposes a monthly average rate of 0.17 pounds per day of hexavalent chromium discharged from Outfall 304. U. S. Steel further states that the Permits speak for themselves and are the best evidence of the cited excerpts and context thereof.

76. According to U.S. Steel's DMRs, U.S. Steel exceeded (i) its daily maximum quantity limit for hexavalent chromium three times within the five-year statute of limitations period and (ii) the monthly average rate for hexavalent chromium one time within the five-year statute of limitations period, for a total of thirty-three days of violation.

ANSWER: U. S. Steel admits that it violated the (i) daily maximum limit for hexavalent chromium on January 12, 2017, April 11, 2017, and April 12, 2017; and (ii) monthly average rate for hexavalent chromium in April 2017. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof. The remaining allegations contained in Paragraph 76 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any remaining allegations in this Paragraph are deemed to be factual matters, they are denied.

WHOLE EFFLUENT TOXICITY

77. Both the 2011 permit and the 2016 permit require U.S. Steel to conduct quarterly bioassay tests on model organisms to monitor the toxicity of the discharge from Outfall 004. If the effluent exceeds 1.5 chronic toxicity units (TUc) during the tests on *Ceriodaphnia dubia*, this is considered to demonstrate chronic toxicity and constitutes a failure of the toxicity test.

ANSWER: U. S. Steel admits that the 2011 Permit and the 2016 Permit require U. S. Steel to conduct quarterly bioassay tests on model organisms to monitor the toxicity of the discharge from Outfall 004. U. S. Steel denies the remaining allegations in Paragraph 77. U. S. Steel further states that the Permits speak for themselves and are the best evidence of the cited excerpts and context thereof.

78. Section 101(a)(3) of the CWA prohibits the discharge of "toxic pollutants in toxic amounts." 33 U.S.C. § 1251(a)(3).

ANSWER: U. S. Steel denies the accuracy of the Plaintiff's paraphrasing of Section 101(a)(3), 33 U.S.C. § 1251(a)(3), in Paragraph 78. U. S. Steel admits that Section 101(a)(3) of the CWA states as follows: "it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited." U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

79. According to U.S. Steel's DMRs, U.S. Steel failed the quarterly toxicity test on *C. dubia* three times during the five-year statute of limitations period for a total of three violations.

ANSWER: U. S. Steel admits that it self-reported in the DMRs the failures of the quarterly toxicity tests on *C. dubia* for the weeks of August 4, 2013, June 8, 2014, and June 22, 2014. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof.

TEMPERATURE

80. Heat is a "pollutant" as defined by Section 502 of the CWA, 33 U.S.C. § 1362(6).

ANSWER: U. S. Steel admits that heat is a "pollutant" as defined by Section 502 of the CWA. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

81. USEPA's *Analysis and Control of Thermal Pollution Training Manual* states that even "temperatures which are not lethal to fish or shellfish may affect metabolism, reproduction and growth, as well as reduce important food organisms, thereby inducing a change in the balance of the entire system."

ANSWER: Paragraph 81 purports to recite a portion of USEPA's *Analysis and Control of Thermal Pollution Training Manual.* This Manual speaks for itself and is the best evidence of the cited excerpts and context thereof and, therefore, U. S. Steel neither admits nor denies these allegations.

82. All temperature limits are for Outfall 500, which measures the "combined effect of the [thermal] effluent from Outfalls 002, 003 and 004." Both the 2011 permit and the 2016 permit mandate that "there shall be no rise in the temperature of the Portage-Burns Waterway of greater than 2°F, as determined from upstream temperature and downstream temperature at the edge of the mixing zone." The 2016 permit defines the "mixing zone" as "the area of Portage-Burns Waterway extending laterally from Outfall 002 to one-half the width of Portage-Burns Waterway and to a distance of 300 feet downstream of Outfall 004."

ANSWER: U. S. Steel admits that in the 2011 and 2016 Permits, the temperature limits are for Outfall 500, which measures the "combined effect of the effluent from Outfalls 002, 003 and 004." U. S. Steel admits that both the 2011 Permit and the 2016 Permit state that

"there shall be no rise in the temperature of the Portage-Burns Waterway of greater than 2°F, as determined from upstream temperature and downstream temperature at the edge of the mixing zone." U. S. Steel admits that the 2016 Permit defines the "mixing zone" as "the area of Portage-Burns Waterway extending laterally from Outfall 002 to one-half the width of Portage-Burns Waterway and to a distance of 300 feet downstream of Outfall 004." U. S. Steel further states that on March 19, 2014, it was granted a modification to the 2011 Permit, to allow the use of a thermal model to determine compliance, which is an alternative to direct, in-situ measurements. This provision was retained in the 2016 Permit. U. S. Steel further states that the Permits and Permit modifications speak for themselves and are the best evidence of the cited excerpts and context thereof.

83. Both the 2011 permit and the 2016 permit mandate that during the months of December through March, the downstream temperature at the edge of the mixing zone may not exceed the maximum limit for the month by more than 3°F at any time. The relevant monthly maximums are: 57°F in December, 50°F in January, 50°F in February, and 60°F in March.

ANSWER: U. S. Steel admits that the 2011 and 2016 Permits establish maximum monthly temperature limits of 57°F in December, 50°F in January, 50°F in February, and 60°F in March. U. S. Steel admits that the 2011 and 2016 Permits prohibit exceeding the maximum temperature limits by more than 3°F at the edge of the mixing zone. U. S. Steel further states that on March 19, 2014, it was granted a modification to the 2011 Permit, to allow the use of a thermal model to determine compliance, which is an alternative to direct, in-situ measurements. This provision was retained in the 2016 Permit. U. S. Steel further states that the Permits and

Permit modifications speak for themselves and are the best evidence of the cited excerpts and context thereof.

84. During the months of April through November, the downstream temperature may not exceed the limit for each month (subject to the below exceptions). For April, May, September, October, and November, the limit for each month is 65°F, for June, July, and August, the limit of each month is 70°F.

ANSWER: U. S. Steel admits that the 2016 Permit establishes a downstream temperature limit of 65°F for April, May, September, October, and November and 70°F for June, July, and August subject to exceptions. U. S. Steel further states that on March 19, 2014, it was granted a modification to the 2011 Permit, to allow the use of a thermal model to determine compliance, which is an alternative to direct, in-situ measurements. This provision was retained in the 2016 Permit. U. S. Steel further states that the Permits and Permit modifications speak for themselves and are the best evidence of the cited excerpts and context thereof.

85. The 2011 permit allows an exception to the above April-through-November limits when the upstream temperature equals or exceeds the maximum limitation for that day. The 2016 permit allows an exception to the above April-through-November limits when "the upstream temperature is within 2°F of the maximum limitation for that day." This exception in the 2016 permit allows for downstream temperatures to exceed the limit for the month so long as the downstream temperature is within 2°F of the maximum limit for that day.

ANSWER: U. S. Steel admits that an exception to the April-through-November limits exists when upstream temperature equals or exceeds the maximum limitation for that day.

U. S. Steel denies that the 2016 Permit allows for downstream temperatures to exceed the limit for the month so long as the downstream temperature is within 2°F of the maximum limit for that day but admits that the 2016 Permit allows for temperatures to exceed the limit for the month so long as the upstream temperature is within 2°F of the maximum limit for that day. U. S. Steel further states that on March 19, 2014, it was granted a modification to the 2011 Permit, to allow the use of a thermal model to determine compliance, which is an alternative to direct, in-situ measurements. U. S. Steel further states that the Permits and Permit modifications speak for themselves and are the best evidence of their contents and context thereof.

86. According to U.S. Steel's DMRs, U.S. Steel exceeded the applicable daily-maximum downstream-temperature limit for Outfall 500 sixteen times, when no exception applied, within the five-year statute-of-limitations period. It also exceeded the daily-maximum receiving-water temperature-difference limit for Outfall 500 three times within the five-year statute-of-limitations period. Thus U.S. Steel had a total of nineteen temperature violations within the five-year statute-of-limitations period.

ANSWER: U. S. Steel denies that it has had a total of nineteen temperature violations. Specifically, U. S. Steel denies that the DMRs show exceedances of daily-maximum downstream-temperature limits at Outfall 500 on May 26, 2014, May 27, 2014, May 29, 2014, June 2, 2014, June 3, 2014, September 15, 2014, October 2, 2014, October 7, 2015, October 8, 2015, October 9, 2015, October 10, 2015, October 22, 2015, or October 23, 2015 as described in Paragraph 91 below. U. S. Steel admits that it self-reported in the DMRs exceedances of daily-maximum downstream-temperature limits at Outfall 500 on February 26, 2017, February 27, 2017, and February 28, 2017 and exceedances of the daily-maximum receiving-water temperature-

difference limit at Outfall 500 on October 1, 2014, September 7, 2016 and November 2, 2016. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof.

OIL AND GREASE

87. Oil and grease are "pollutants" as defined by Section 502 of the CWA, 33 U.S.C. § 1362(6).

ANSWER: U. S. Steel admits that oil and grease are "pollutants" as defined by Section 502 of the CWA. U. S. Steel further states that the CWA speaks for itself and is the best evidence of the cited excerpts and context thereof.

88. The USEPA website states that petroleum and non-petroleum oils can "cause devastating physical effects, such as coating animals and plants with oil and suffocating them by oxygen depletion; be toxic and form toxic products; destroy future and existing food supplies, breeding animals, and habitats; produce rancid odors; foul shorelines, clog water treatment plants, and catch fire when ignition sources are present; and form products that linger in the environment for many years.

ANSWER: U. S. Steel states that the phrase "the USEPA website states" is vague and, therefore, denies same. U. S. Steel further states that USEPA's website speaks for itself and is the best evidence of the cited excerpts and context thereof.

89. Both the 2011 permit and the 2016 permit contain a daily maximum-quantity limit of 765 pounds per day of oil and grease discharged from Outfall 304.

ANSWER: U. S. Steel admits that the Permits contain a daily maximum limit of 765 pounds per day for oil and grease discharged from Outfall 304. U. S. Steel further states that the Permits speak for themselves and are the best evidence of the cited excerpts and context thereof.

90. According to U.S. Steel's DMRs, U.S. Steel exceeded its daily maximum-quantity limit for oil and grease one time within the five-year statute-of-limitations period for a total of one violation.

ANSWER: U. S. Steel admits that it self-reported in the DMRs an exceedance of the daily maximum quantity limit for oil and grease on March 19, 2015. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of the cited excerpts and context thereof.

TABLE OF QUANTITATIVE LIMIT VIOLATIONS

91. Each row of the following table sets forth an individual violation by U.S. Steel of a numeric permit violation, by describing the discharge type, violation date(s), outfall, measured value, allowance type, and relevant permit allowance.

Discharge Type	**Date(s) of Violation**	**Outfall**	**Measured Value**	**Type of Allowance**	**Permit Allowance**
Chromium, Total Recoverable	02/03/2013	304A	36.17 pounds per day (lbs/day)	Daily maximum	30 lbs/day
Whole Effluent Toxicity, Chronic – C. dubia	Week of 08/04/2013	004	2.0 TUc	Quarterly maximum	1.5 TUc (100/IC25)
Temperature, Downstream	05/26/2014	500A	65.66°F	Daily maximum	65°F
Temperature, Downstream	05/27/2014	500A	65.37°F	Daily maximum	65°F

Temperature, Downstream	05/29/2014	500A	66.25°F	Daily maximum	65°F
Whole Effluent Toxicity, Chronic – C. dubia	Week of 06/08/2014	004	2.9 TUc (100/NOEC) / 2.3 TUc (100/IC25)	Quarterly maximum	1.5 TUc (100/NOEC) / 1.5 TUc (100/IC25)
Whole Effluent Toxicity, Chronic – C. dubia	Week of 06/22/2014	004	2.9 TUc (100/NOEC) / 1.6 TUc (100/IC25)	Quarterly maximum	1.5 TUc (100/NOEC) / 1.5 TUc (100/IC25)
Temperature, Downstream	06/02/2014	500A	71.11°F	Daily maximum	70°F
Discharge Type	Date(s) of Violation	Outfall	Measured Value	Type of Allowance	Permit Allowance
Temperature, Downstream	06/03/2014	500A	70.64°F	Daily maximum	70°F
Temperature, Downstream	09/15/2014	500A	66.65°F	Daily maximum	65°F
Temperature Difference Receiving Water	10/01/2014	500A	7.55°F	Daily rise	2°F
Temperature, Downstream	10/02/2014	500A	66.73°F	Daily maximum	65°F
Oil & Grease	03/19/2015	304A	848 lbs/day	Daily maximum	765 lbs/day
Temperature, Downstream	10/07/2015	500A	65.6°F	Daily maximum	65°F
Temperature, Downstream	10/08/2015	500A	65.6°F	Daily maximum	65°F
Temperature, Downstream	10/09/2015	500A	65.1°F	Daily maximum	65°F
Temperature, Downstream	10/10/2015	500A	65.4°F	Daily maximum	65°F
Temperature, Downstream	10/22/2015	500A	65.7°F	Daily maximum	65°F
Temperature, Downstream	10/23/2015	500A	65.5°F	Daily maximum	65°F
Temperature Difference Receiving Water	09/07/2016	500A	2.1°F	Daily rise	2°F

Temperature Difference Receiving Water	11/02/2016	500A	2.1°F	Daily rise	2°F
Chromium, Hexavalent	01/12/2017	304A	2.371 lbs/day	Daily maximum	0.51 lbs/day
Temperature, Downstream	02/26/2017	500A	53.35°F	Daily maximum	50°F
Temperature, Downstream	02/27/2017	500A	53.93°F	Daily maximum	50°F
Temperature, Downstream	02/28/2017	500A	54.54°F	Daily maximum	50°F
Chromium, Total Recoverable	04/10/2017	304A	138.8 lbs/day	Daily maximum	30 lbs/day
Chromium,	04/11/2017	304A	204.0 lbs/day	Daily	30 lbs/day
Discharge Type	Date(s) of Violation	Outfall	Measured Value	Type of Allowance	Permit Allowance
Total Recoverable				maximum	
Chromium, Total Recoverable	April 2017	304A	13.97 lbs/day	Monthly average maximum	10 lbs/day
Chromium, Hexavalent	04/11/2017	304A	902.8 lbs/day	Daily maximum	0.51 lbs/day
Chromium, Hexavalent	04/12/2017	304A	1.782 lbs/day	Daily maximum	0.51 lbs/day
Chromium, Hexavalent	April 2017	304A	50.26 lbs/day	Monthly average maximum	0.17 lbs/day
Chromium, Total Recoverable	10/25/2017	304A	56.7 lbs/day	Daily Maximum	30 lbs/day

ANSWER: U. S. Steel denies allegations of noncompliance with its Permit relative to downstream temperature conditions for the dates of: May 26, 2014, May 27, 2014, May 29, 2014, June 2, 2014, June 3, 2014, September 15, 2014, October 2, 2014, October 7, 2015, October 8, 2015, October 9, 2015, October 10, 2015, October 22, 2015, and October 23, 2015. U. S. Steel denies the allegations of noncompliance with its Permit listed for Whole Effluent Toxicity. U. S. Steel admits

Permit violations for the remaining "discharge type[s]" and corresponding dates. U. S. Steel further states that the DMRs speak for themselves and are the best evidence of their content and context thereof.

92. The February 3, 2013 Total Recoverable Chromium violation reflects the amount reported by U.S. Steel in the narrative cover letter it appended to its DMR submission. The DMR data that U.S. Steel reported for this day was 34.37 lbs/day, which would also violate the relevant permit limit.

ANSWER: U. S. Steel admits that the February 3, 2013 Total Recoverable Chromium value in the table included in Paragraph 91 reflects the amount reported by U. S. Steel in the narrative cover letter appended to the DMR submission. U. S. Steel states that the DMRs speak for themselves and are the best evidence of their content and context thereof; therefore, U. S. Steel neither admits nor denies the remaining allegations.

93. The April 11, 2017 Hexavalent Chromium figure was submitted by U.S. Steel in its April 2017 DMR. U.S. Steel staff attested to the accuracy of this figure in certifying its submission. Nonetheless, U.S. Steel stated in a footnote that this figure represented "an absurd result" of the mathematical formula required by the permit. According to other reports U.S. Steel submitted to IDEM, during April 11 and 12, 2017, the facility released a total of approximately 346 pounds of total chromium, approximately 298 pounds of which was hexavalent chromium.

ANSWER: U. S. Steel states that the phrase "other reports U. S. Steel submitted to IDEM" is vague and, therefore, denies same. U. S. Steel admits that on April 17, 2017, it issued a letter to IDEM disclosing that during April 11 and 12, 2017, the Midwest Facility released a

total of approximately 346 pounds of total chromium, approximately 298 pounds of which was hexavalent chromium. U. S. Steel admits that the grab result for hexavalent chromium was identified as "absurd" because it greatly exceeded the 24-hour composite for total chromium, which suggests that the discharge was highly variable and that the grab concentration was not representative of the quality of discharge over the course of the day. U. S. Steel determined that the 24-hour composite was more representative of quantity discharged and reported that value. U. S. Steel further states that the DMRs and "other reports U.S. Steel submitted to IDEM" speak for themselves and are the best evidence of their content and context thereof.

94. Pursuant to Part I.B. in both the 2011 permit and the 2016 permit, U.S. Steel is required to follow certain "Narrative Water Quality Standards." These standards mandate that the Midwest Plant's "[d]ischarge . . . shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants . . . that are in amounts sufficient to be unsightly or deleterious . . . [or] that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance." The discharge must also not be "in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, or other animals, plants, or humans." Outside the mixing zone, the discharge must not contain "substances in concentrations which . . . are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants."

ANSWER: U. S. Steel admits that Paragraph 94 describes provisions of the 2011 and 2016 Permits. U. S. Steel further states that the 2011 and 2016 Permits speak for themselves and are the best evidence of their content and context thereof.

95. Upon information and belief, U.S. Steel has violated the Narrative Water Quality Standards in its permit. On the morning of April 11, 2017, U.S. Steel reported a bluish-green color in the effluent from Outfall 004.

ANSWER: U. S. Steel admits that on the morning of April 11, 2017, it reported to the National Response Center discoloration in the effluent from Outfall 004. U. S. Steel admits to a violation of narrative water quality standards for discoloration on April 11, 2017. The remaining allegations contained in Paragraph 95 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any remaining allegations in this Paragraph are deemed to be factual matters, they are denied.

96. Additionally, as reported in the relevant monthly DMRs and other reports made by U.S. Steel to IDEM, effluent discoloration was also observed one time in December 2013 and two times in April 2016. In all three cases prior to the April 2017 chromium incident, U.S. Steel reported white or cloudy discoloration observed at Outfall 004, and in all three cases, IDEM noted these events as violations.

ANSWER: U. S. Steel admits that it reported discoloration observed on December 12, 2013, April 1, 2016, and April 5, 2016 at Outfall 004. U. S. Steel states that the allegations that "IDEM noted these events as violations," of "relevant monthly DMRs," and of "other reports made by U. S. Steel to IDEM" are vague and, therefore, denies same. U. S. Steel further states that the "relevant monthly DMRs" and "other reports made by U. S. Steel to IDEM" speak for themselves and are the best evidence of their content and context thereof.

97. Upon information and belief, the April 2017 discharge of hexavalent chromium also constitutes a violation of the permit condition forbidding water "outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants." The USEPA's Final Removal Report for this incident describes observed concentrations of hexavalent chromium outside of the mixing zone as potentially harmful to human health.

ANSWER: Paragraph 97 states legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies this Paragraph. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied. U. S. Steel further states that that USEPA's Final Removal Report speaks for itself and is the best evidence of its content and context thereof.

VIOLATIONS OF PERIT CONDITIONS REQUIRING PROPER MAINTENANCE AND APPROPRIATE RESPONSES TO DISCHARGE VIOLATIONS

98. Pursuant to the 2016 permit, U.S. Steel "shall at all times maintain in good working order and efficiently operate all facilities and systems . . . for the collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of this permit."

ANSWER: U. S. Steel admits that Paragraph 98 describes provisions of the 2016 Permit. U. S. Steel further states that the Permit speaks for itself and is the best evidence of the cited excerpts and context thereof.

99. Based on publicly available data, U.S. Steel failed to meet maintenance obligations required by the permit. Photographs taken immediately after the April 2017 spill show extensive corrosion that allowed for the unpermitted discharge of chromium into Burns Waterway.

ANSWER: U. S. Steel states that the phrases "publicly available data" and "photographs taken immediately after the April 2017 spill" are vague and, therefore, denies same. U. S. Steel further states that it lacks sufficient knowledge regarding the "publicly available data" and "photographs" but admits that a failure of the expansion joint in April caused an unpermitted release in April 2017. The remaining allegations in Paragraph 99 state legal conclusions to which no answer is required and, therefore, U. S. Steel neither admits nor denies the remaining allegations. To the extent that any allegations in this Paragraph are deemed to be factual matters, they are denied.

100. The IDEM inspection report following the April 2017 incident rated the facility's "Operations and Maintenance" as "unsatisfactory" because of the equipment failure that led to the re-routing of toxic wastewater. Additionally, IDEM's post-incident inspection rated "flow measurement" as "marginal" due to potential obstructions in the channels of two of the facility's outfalls.

ANSWER: U. S. Steel states that the phrases "IDEM inspection report" and "IDEM's post-incident inspection" are vague and, therefore, denies same. U. S. Steel admits that an "Inspection Summary" from IDEM, dated June 2, 2017, stated in part: "Operation and Maintenance were rated as unsatisfactory" and "Flow measurement was rated as marginal. . . ." U. S. Steel further states that the "IDEM inspection report" and "IDEM's post-incident

inspection" speak for themselves and are the best evidence of their contents and context thereof. U. S. Steel denies the remaining allegations contained in Paragraph 100.

101. In February 2013, U.S. Steel attributed its excessive chromium discharge to control malfunctioning.

ANSWER: U. S. Steel admits that on February 3, 2013, a treatment plant process control pH excursion was experienced on one of the two process trains at the Chrome Treatment Plant causing soluble chromium to carry through to the discharge of Outfall 204 and subsequently Outfall 304. U. S. Steel denies the remaining allegations contained in Paragraph 101.

102. In March 2015, the Midwest Plant exceeded its permitted levels of oil and grease discharge because a loss of oil-processing capabilities led, according to U.S. Steel's report, to "accumulation" of oil "during the week prior" that was either not detected or inadequately addressed.

ANSWER: U. S. Steel admits the Midwest Plant exceeded its permitted discharge limits of oil and grease on March 19, 2015. U. S. Steel states that the references to "U.S. [sic] Steel's report" are vague and, therefore, denies same. U. S. Steel admits that the cover letter to the March 2015 monthly report, dated April 28, 2015, states in part that a "[l]oss of oil processing capabilities at the OilTech facility caused oil and greases to accumulate through the treatment system during the week prior to the incident." U. S. Steel further states that "U.S. [sic] Steel's report" speaks for itself and is the best evidence of its contents and context thereof. U. S. Steel denies the remaining allegations contained in Paragraph 102.

103. In two separate but related incidents in April 2016, leaking oil was not properly contained and mingled with non-contact cooling water, leading to the discharge of untreated oil-contaminated water.

ANSWER: U. S. Steel admits that on April 1, 2016 and April 5, 2016, oil leaked into non-contact cooling water causing effluent discoloration. U. S. Steel admits that both events resulted from an oil leak into the service water upstream of the Morg Oil Heat Exchanger at the Midwest Plant. U. S. Steel denies the remaining allegations contained in Paragraph 103.

104. In October 2017, U.S. Steel discharged almost twice as much total chromium as its permit allows. According to U.S. Steel's report, a technician reported that a daily 24-hour composite sample for Outfall 204 was "discolored." Subsequent investigation revealed that flow through a lamella clarifier was not uniform "due to heavier solids buildup on one side of the lamella, and as a result there was excessive solids carryover."

ANSWER: U. S. Steel states that the characterization of a discharge as "almost twice as much total chromium as [the] Permit allows" is vague and, therefore, denies same. U. S. Steel admits that an unpermitted release of chromium occurred on October 25, 2017. U. S. Steel further states that on October 26, 2017, during routine sampling at Internal Outfall 204, blue discharge with visible solids was observed. U. S. Steel personnel who investigated found the lamella clarifier of the A Train, the sole train in use at the time, was overflowing with solids in two of the three discharge channels. Subsequent investigation revealed that flow through a lamella clarifier was not uniform due to heavier solids buildup on one side of the lamella, and as

a result there was excessive solids carryover. U. S. Steel denies the remaining allegations contained in Paragraph 104.

105. According to IDEM, the technician discovered the October 2017 total chromium violation when, in the course of conducting routine sampling at Outfall 204, the technician observed that the discharge was "blue with visible solids."

ANSWER: U. S. Steel admits that an IDEM report dated December 11, 2017 states in part, "On October 26, 2017, ALS, a third party contractor working for US [sic] Steel - Midwest, was conducting routine sampling at Internal Outfall 204 and observed the discharge was blue with visible solids." U. S. Steel denies the remaining allegations contained in Paragraph 105. U. S. Steel further states that the December 11, 2017 IDEM report speaks for itself and is the best evidence of its content and the context thereof.

106. Pursuant to the 2016 permit, in the event of an unauthorized release or discharge, including any spill, leak or discharge of non-stormwater not authorized by the permit, U.S. Steel must "take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with [the] permit," including by conducting accelerated or additional monitoring to determine the nature and impact of the noncompliance.

ANSWER: U. S. Steel admits that Paragraph 106 describes provisions of the 2016 Permit. U. S. Steel further states that the Permit speaks for itself and is the best evidence of the cited excerpts and context thereof.

107. According to IDEM, U.S. Steel failed to take reasonable steps to minimize or correct the October 2017 illegal total chromium discharge because U.S. Steel failed to perform monitoring necessary to determine how much of that illegal discharge was comprised of hexavalent chromium. IDEM described such monitoring as necessary because the discharge was "blue with visible solids."

ANSWER U. S. Steel admits that an "Inspection Summary" from IDEM, dated December 11, 2017, stated in part: "self-monitoring was rated as unsatisfactory." To the extent that the remaining allegations derive from this Inspection Summary, U. S. Steel states that the Inspection Summary speaks for itself and is the best evidence of its content and context thereof. U. S. Steel denies the characterization of "illegal total chromium discharge" and "illegal discharge."

108. These documented maintenance failures indicate a pervasive and persistent failure by U.S. Steel to maintain the Midwest Plant in good working order as necessary to comply with the limitations and conditions of its NPDES permit.

ANSWER: U. S. Steel denies the allegations contained in Paragraph 108.

109. Upon information and belief, U.S. Steel's failure in performing its maintenance responsibilities at the Midwest Plant are not limited to the single days on which the above consequences of such failures were observed. These observed and reported incidents indicate that U.S. Steel continues not to maintain properly the Midwest Plant.

ANSWER: U. S. Steel denies the allegations contained in Paragraph 109.