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PROTECT
CHICAGO

Audit of Chicago Department of Public Health's Construction and Demolition Debris Recycling Enforcement

JUNE 14, 2023

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Acronyms

| | |
|----------|--|
| AIS | Department of Assets, Information and Services |
| CDPH | Chicago Department of Public Health |
| C&D | Construction and Demolition |
| DOB | Department of Buildings |
| DOF | Department of Finance |
| IEPA | Illinois Environmental Protection Agency |
| MCC | Municipal Code of Chicago |
| OBM | Office of Budget and Management |
| OIG | Office of Inspector General |
| U.S. EPA | United States Environmental Protection Agency |

CITY OF CHICAGO OFFICE OF INSPECTOR GENERAL

Audit: Chicago Department of Public Health's Construction and Demolition Debris Recycling Enforcement

C&D Debris Recycling

allows concrete, wood, and metal to be recycled for new asphalt, furniture, and more.

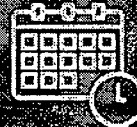


25% of 4.1 million tons of waste generated in Chicago in 2020 was from C&D debris.*

*Per the City of Chicago Waste Strategy 25% is an estimate. Lack of enforcement makes actual amount unknown.

The Chicago Environmental Protection and Control Ordinance Requires CDPH to:

- Ensure contractors recycle at least 50% of C&D debris within 30 days of project completion, and



- Create a dedicated C&D debris management fund to support regulation of C&D debris.

Finding: CDPH Is Not Enforcing Compliance with the Ordinance

- CDPH does not ensure that contractors comply and does not know the population of projects subject to C&D debris recycling requirements.



- The dedicated fund was not created. Nearly \$1.2 million collected between January 1, 2017 and July 1, 2021 was deposited into the City's corporate fund instead.

CDPH - Chicago Department of Public Health
C&D - Construction and Demolition

I | Executive Summary

The City of Chicago Office of Inspector General (OIG) conducted an audit of the Chicago Department of Public Health's (CDPH) enforcement of the City's construction and demolition (C&D) debris recycling ordinance. CDPH is responsible for ensuring that contractors who work on construction and demolition projects recycle at least 50% of C&D debris generated, as required by the Municipal Code of Chicago (MCC). Contractors must demonstrate compliance with the ordinance within 30 days of project completion and may be subject to fines if they do not meet the 50% requirement or if they fail to demonstrate compliance within the 30-day window. Furthermore, CDPH may coordinate with the Department of Buildings (DOB) to withhold permits or certificates of occupancy. In addition, the MCC requires that a construction/demolition debris management fund "be utilized for the regulation of construction or demolition debris."¹ Such utilization includes "enforcement against illegal dumping of construction and demolition debris and oversight of recycling of concrete debris."

The objectives of the audit were to determine, first, whether CDPH engages in oversight activities—such as reviewing contractor recycler affidavits or sending enforcement letters—to ensure compliance with the City's C&D debris recycling requirements, and, second, whether the City uses the construction/demolition debris management fund in the manner required by the MCC.

A | Conclusion

OIG concluded that CDPH does not ensure that contractors comply with C&D debris recycling requirements. CDPH cannot determine the extent of contractors' compliance or identify contractors who do not follow the requirements. Nor can CDPH calculate the C&D debris recycling rate for inclusion in the Citywide diversion rate.² Additionally, the City does not meet the MCC requirements related to expenditures from the construction/demolition debris management fund. The City, therefore, cannot determine whether it used the \$1,192,550.21 collected between January 1, 2017, and July 1, 2021, in a manner that complies with the MCC.

B | Findings

OIG found that CDPH does not regularly engage in oversight activities—such as reviewing contractor recycler affidavits beyond a cursory review that ensures the recycler affidavits total correctly, or sending enforcement letters—to ensure that contractors comply with C&D debris recycling requirements. CDPH cannot identify the population of C&D projects subject to the MCC and has not engaged in enforcement since late 2018.

In addition, the City has not created the construction/demolition debris management fund which is required by the MCC, and therefore cannot determine whether the \$1,192,550.21 collected between January 1, 2017, and July 1, 2021, has been used to support regulation of C&D debris as mandated. Contrary to applicable law, the City deposited fees collected during this period into the corporate fund—its general operating fund—rather than a construction/demolition debris management fund.

¹ City of Chicago, Municipal Code § 11-4-1962.

² A diversion rate is the percentage of waste generated that is diverted from landfills by recycling, reuse, composting, and other diversion means.

C | Recommendations

OIG recommends that CDPH work with DOB to develop a process to identify the population of projects subject to the MCC's C&D debris recycling requirements. CDPH should document and implement procedures to ensure that contractors submit the required compliance documentation within 30 days of project completion. The Department should also document and implement standardized procedures to review the documentation and ensure that each contractor recycles at least 50% of C&D debris, as required. CDPH should develop and implement both enforcement procedures and a method to incorporate the C&D debris diversion rates into the Citywide diversion rate. CDPH should also implement a process to periodically train contractors on the MCC requirements and collaborate with the chief sustainability officer to develop procedures that incentivize or further require material reuse. Finally, CDPH should work with the relevant departments to create the required dedicated construction/demolition debris management fund, and ensure both that C&D debris fees are deposited there and that, as required by applicable law, the fund is used to regulate C&D debris. Such regulation, according to the MCC, would include "monitoring, planning, inspecting, providing technical assistance, and enforcing rules, regulations and ordinances with respect to [...] construction/demolition debris." It would also include the oversight of concrete debris recycling and enforcement against illegal dumping of debris.

D | CDPH Response

In response to our audit findings and recommendations, CDPH stated that it will work with DOB and the Department of Assets, Information and Services (AIS) to identify the population of projects subject to the MCC's C&D debris recycling requirements. It reported that DOB's permitting management system no longer contains information needed to identify such projects, but doing so should be possible after a system update planned for 2026. CDPH reported that, in the interim, it will purchase a web-based solution to facilitate its identifying such projects based on contractors' responses to an online questionnaire. CDPH intends for this system to

- ensure contractors submit required documentation within 30 days of completing the project;
- automatically flag contractors that self-report noncompliance with the 50% recycling requirement; and
- calculate diversion rates.

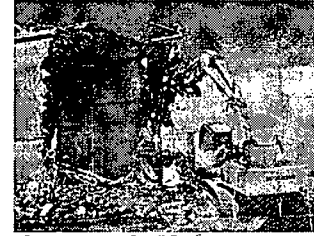
CDPH will also work with the vendor of the web-based solution to develop and conduct online training tutorials. CDPH estimates that this new system will be available in December 2024. In addition, CDPH will work with the City's chief sustainability officer to explore procedures to incentivize recycling and reuse of materials and require the deconstruction of buildings.

Finally, CDPH, in collaboration with other City departments, will develop and implement procedures to use the required dedicated construction/demolition debris management fund. CDPH will use the fund to "support dedicat[ed] staffing and sustain the usage of a web-based waste management tracking software solution."

The specific recommendations related to each finding, and OIG's response, are described in the "Findings and Recommendations" section of this report.

II | Background

C&D debris is the material generated by construction, demolition, and renovation projects. C&D materials make up a large waste stream in the U.S. The United States Environmental Protection Agency (U.S. EPA) estimated that the U.S. generated 600 million tons of C&D debris in 2018.³ As shown in Figure 1, C&D debris includes a variety of both construction materials and materials from the surrounding landscape.⁴



Source: U.S. EPA³

FIGURE 1: Construction and demolition debris includes a wide variety of materials

| Types of C&D Debris | Examples |
|---|--|
| Building construction and demolition debris | Concrete, wood, brick, gypsum (the main component of drywall), metals, glass, plastics, soil, and rock |
| Road construction and demolition debris | Asphalt, concrete, metals, soil, and rock |
| Salvageable building components | Doors, windows, and plumbing fixtures |

Source: U.S. EPA

In July 2021, the City released the *2021 City of Chicago Waste Strategy*, “a comprehensive waste and materials management plan that overhauls the City’s waste system with the goal of decreasing waste disposal and associated negative environmental impacts; reducing costs and increasing efficiency; maximizing economic investment and workforce development opportunities; and addressing social and environmental justice inequities.”⁶ The Waste Strategy described C&D debris and recommended that the City assess C&D debris recycling compliance.

The Waste Strategy estimated that, in 2020, the City generated about 4.13 million tons of waste, of which an estimated 1.05 million tons comprised C&D debris from building construction and demolition. Notably, this is less than the average of 1.3 to 1.4 million tons per year prior to the COVID-19 pandemic. As shown in Figure 2, the Waste Strategy estimated that C&D debris made up 25.5% of the City’s waste stream in 2020.⁷

³ U.S. EPA, “Advancing Sustainable Materials Management: 2018 Fact Sheet Assessing Trends in Materials Generation and Management in the United States,” December 2020, 19, accessed May 26, 2023, https://www.epa.gov/sites/default/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf.

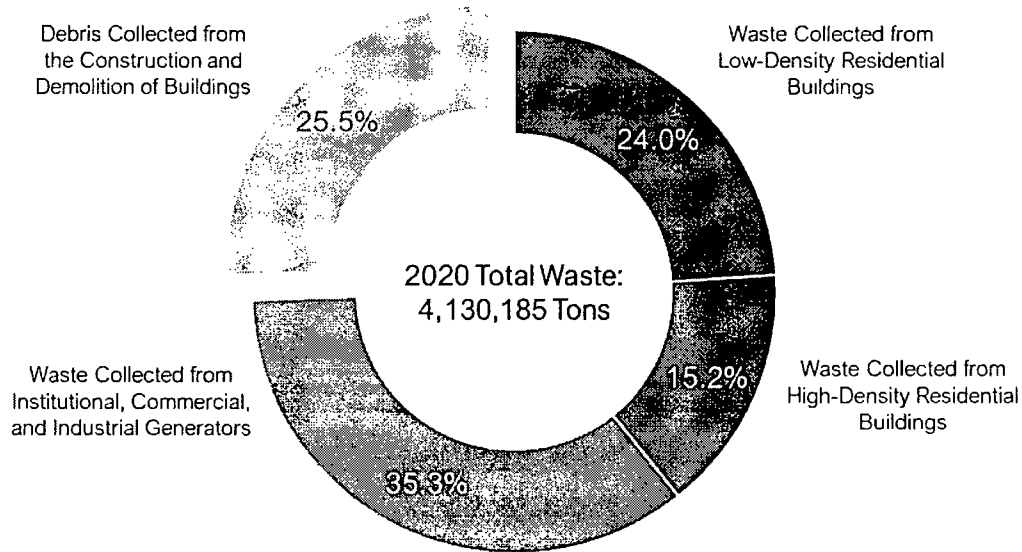
⁴ U.S. EPA, “Sustainable Management of Construction and Demolition Materials,” accessed May 26, 2023, <https://www.epa.gov/smm/sustainable-management-construction-and-demolition-materials>.

⁵ U.S. EPA “Facts and Figures about Materials, Waste and Recycling,” accessed May 26, 2023, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/construction-and-demolition-debris-material>.

⁶ City of Chicago, “2021 Waste Strategy,” accessed May 26, 2023, <https://www.chicago.gov/city/en/progs/env/2021-waste-strategy.html>.

⁷ The Waste Strategy estimated the amount of C&D debris because, as discussed below in Finding 1, CDPH does not collect documentation of such waste, despite its being required to do so by ordinance. Moreover, this estimate does not include C&D debris from road construction and demolition projects, or salvageable building components. The Delta Institute. “City of Chicago Waste Strategy Existing Conditions: Waste in Chicago.” July 2021, 9 – 10, accessed May 26, 2023, <https://www.chicago.gov/content/dam/city/progs/env/Chicago-Waste-Strategy/Chicago-Waste-Strategy-Existing-Conditions-Report-7.12.21.pdf>.

FIGURE 2: Construction and demolition debris accounts for more than a quarter of the total waste generated in Chicago



Source: City of Chicago Waste Strategy

A | Benefits of C&D Debris Recycling

C&D debris generally includes materials that can be recycled and, in some cases, serve as substitutes for new raw materials. For example,

- asphalt, concrete, and rubble can be recycled into aggregate or new asphalt and concrete;
- wood can be recycled for products such as furniture, mulch, or compost; and
- metals, such as steel, copper, and brass can be reused for a variety of purposes.

The construction industry is the leading consumer of raw materials in the U.S.; in 2014, it accounted for about 75% of raw materials used.⁸ And, according to the 2019 Global Resources Outlook report from the United Nations Environment Programme’s International Resource Panel, as much as half of global greenhouse gas emissions result from the extraction and processing of materials, fuels, and food.⁹

Thus, reusing materials from projects provides environmental benefits by reducing the need to extract and consume virgin resources for the production of materials. Items like doors, hardware, appliances, glass, and fixtures can be salvaged for use on other projects. Scrap wood can be chipped on site and used as groundcover. Brick, concrete, and masonry can also be reused on-site

⁸ University of Michigan Center for Sustainable Systems, “U.S. Material Use Factsheet,” 2021, 1, accessed May 26, 2023, https://css.umich.edu/sites/default/files/u_s_%20material%20use_css05-18_e2021.pdf

⁹ United Nations International Resource Panel, “Global Resources Outlook 2019,” 2019, 27, accessed May 26, 2023, <https://www.resourcepanel.org/reports/global-resources-outlook>.

as fill, subbase material, or driveway bedding.¹⁰ In addition, recycling C&D debris can save money for those undertaking construction projects; by reusing or selling C&D debris, they can avoid or offset waste hauling fees on the debris created by their projects.

Recycling C&D debris also helps conserve landfill space and reduces the environmental impacts associated with landfill reliance. The Illinois Environmental Protection Agency (IEPA) reported that, as of January 1, 2022, landfills in the Chicago Metropolitan Area had the capacity to receive waste for approximately eight more years. As shown in Figure 3, the Chicago metropolitan area has the shortest landfill life expectancy of IEPA's seven Illinois regions.¹¹

FIGURE 3: The Chicago metropolitan region's landfills are projected to fill in under ten years

| Region Number | Geographic Area | Number of Landfills | Projected Life Expectancy as of January 1, 2022 (Years) |
|---------------|-----------------------|---------------------|---|
| 1 | Northwestern Illinois | 7 | 21 |
| 2 | Chicago Metropolitan | 4 | 8 |
| 3 | Peoria/Quad Cities | 7 | 23 |
| 4 | East Central Illinois | 6 | 34 |
| 5 | West Central Illinois | 4 | 30 |
| 6 | St. Louis Metro East | 4 | 14 |
| 7 | Southern Illinois | 4 | 51 |

Source: IEPA, Illinois Landfill Disposal Capacity Report, 2022

U.S. landfills are the nation's third-largest source of human-generated methane gas, which harms natural habitats and human livelihood.¹² Specific harmful impacts associated with methane gas include,

- disruption of rural and urban economies;
- food and water scarcity;
- the increased spread of waterborne and foodborne disease; and
- greater risk of injury and death associated with intensifying flooding, heat waves, and fires.

Worldwide, underprivileged communities feel these harms most acutely, regardless of their overall country's level of development.¹³ Although recycling alone will not stop the harmful effects of climate change, it is an essential component of any climate change mitigation strategy.

B | C&D Debris Recycling Ordinances

Municipalities across the country have employed regulations requiring recycling of C&D debris created on project sites. Some municipalities have gone so far as to study, incentivize, or even

¹⁰U.S. EPA, "Sustainable Management of Construction and Demolition Materials," accessed May 26, 2023, <https://www.epa.gov/smm/sustainable-management-construction-and-demolition-materials>.

¹¹IEPA, "Illinois Landfill Disposal Capacity Report," July 2022, 3, accessed May 29, 2023, <https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/waste-management/landfills/landfill-capacity/documents/landfill-capacity-report-2022.pdf?wcmode=disabled>.

¹² U.S. EPA, "Basic Information about Landfill Gas," 2020, accessed May 26, 2023, <https://www.epa.gov/lmop/basic-information-about-landfill-gas>.

¹³ Intergovernmental Panel on Climate Change, "Climate Change 2014 Synthesis Report," 2015, 64, accessed May 26, 2023, https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf.

require, the *deconstruction* of buildings—meaning, carefully disassembling rather than demolishing them—to maximize the amount of salvageable materials for reuse and recycling.

- St. Louis is piloting a program to demolish 30 vacant publicly owned structures and deconstruct 30 comparable structures to compare holistic costs.
- Hennepin County, Minnesota, pays homeowners and developers who use deconstruction techniques two dollars per square foot (up to \$5,000) to offset the additional cost and labor.
- Portland, Oregon, requires deconstructing residential structures instead of demolishing them. Between 2016 and 2019, Portland salvaged more than two million pounds of materials for reuse from deconstruction.

Chicago does not have deconstruction incentives. However, the City's Waste Strategy highlights deconstruction as an innovative option for the City to consider as a waste management tool.¹⁴

Chicago's C&D Debris Recycling Ordinance¹⁵

Section 11-4-1905 of the MCC requires contractors to recycle at least 50% of C&D debris, measured by weight, generated by their construction and demolition projects in the City.¹⁶ Specifically, the MCC identifies the following projects as subject to this requirement:

- "Construction of a new residential building with four or more units.
- Construction of a new non-residential building, other than projects for which the total square footage is 4,000 square feet or less.
- Any rehabilitation of a building that will require a certificate of occupancy from the Department of Buildings (DOB).
- Demolition of a residential building with four or more units that includes the demolition of at least one outside wall.
- Demolition of a non-residential building, other than projects for which the total square footage is 4,000 square feet or less."¹⁷

Contractors can fulfill the 50% requirement either by recycling or reusing materials on-site, or by hauling those materials to a recycling facility. To demonstrate compliance, they must submit to CDPH recycling compliance documentation within 30 days after the project completion date.¹⁸

Contractors who fall short of the required recycling percentage or fail to submit the required forms are subject to additional fines. CDPH may also work with DOB to withhold certificates of occupancy or building permits from contractors until they come into compliance with the C&D debris recycling requirements.¹⁹

¹⁴ The Delta Institute, "City of Chicago Solid Waste Strategy Peer City Profiles," July 2021, 4 – 7, accessed May 26, 2023, <https://www.chicago.gov/content/dam/city/progs/env/Chicago-Waste-Strategy/Peer-City-Analysis-Report-7.12.21.pdf>.

¹⁵ In 2021, the City enacted legislation creating the "Department of Public Health" and assigning it most of the duties previously assigned to the "Board of Health," and changed the title "Commissioner of Health" to "Commissioner of the Department of Public Health."

¹⁶ "Contractors" refer to general contractors as defined by MCC § 4-36-010 and include anyone engaged in a demolition or wrecking of a structure requiring permits under MCC § 14A-4-401 or 14-A-4-407.

¹⁷ MCC § 11-4-1905 (3)

¹⁸ Appendix A contains an example of this recycling compliance documentation.

¹⁹ MCC § 11-4-1905 (4)

III | Objectives, Scope, and Methodology

A | Objectives

The objectives of the audit were to determine whether,

- CDPH engaged in oversight activities, such as reviewing contractor affidavits or sending enforcement letters, to ensure that contractors comply with the C&D debris recycling requirements in MCC § 11-4-1905; and
- the City uses the construction/demolition debris management fund as outlined in MCC § 11-4-1962.

B | Scope

This audit focused on CDPH's responsibility to ensure that contractors are meeting the C&D debris recycling requirements of MCC § 11-4-1905. The audit also assessed whether the City has utilized the construction/demolition debris management fund established by MCC § 11-4-1962. The audit did not assess the certification or oversight of C&D waste recycling facilities, or the permitting process involved in C&D projects.

C | Methodology

To understand the CDPH's C&D debris recycling enforcement process, OIG met with management and staff in CDPH's Environmental Permitting & Inspections team. Additionally, OIG reviewed C&D debris recycling data and interviewed DOB staff to understand that data.

To understand the construction/demolition debris management fund, OIG met with CDPH, Department of Finance (DOF), and Office of Budget Management (OBM) staff. OIG interviewed CDPH staff to discuss how the department used funds collected through MCC § 11-4-1961. OIG interviewed staff at the DOF to understand the collection codes that correspond to fees collected under MCC § 11-4-1961. Additionally, OIG spoke with DOF to understand how to pull financial data related to CDPH. OIG interviewed OBM staff to understand how the City tracks funds collected through MCC § 11-4-1962.

To assess whether the City has used the construction/demolition debris management fund, required under MCC § 11-4-1962, OIG reviewed monthly revenue collection reports maintained by DOF. With help from DOF, OIG identified the relevant collection report codes and reviewed where those revenues were deposited.

D | Standards

OIG conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that OIG plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for its findings and conclusions based on its audit objectives. OIG believes that the evidence obtained provides a reasonable basis for its findings and conclusions based on the audit objectives.

E | Authority and Role

The authority to perform this audit is established in the City of Chicago Municipal Code § 2-56-030, which states that OIG has the power and duty to review the programs of City government in order to identify any inefficiencies, waste, and potential for misconduct, and to promote economy, efficiency, effectiveness, and integrity in the administration of City programs and operations.

The role of OIG is to review City operations and make recommendations for improvement.

City management is responsible for establishing and maintaining processes to ensure that City programs operate economically, efficiently, effectively, and with integrity.

IV | Findings and Recommendations

Finding #1: CDPH does not ensure that contractors comply with C&D debris recycling requirements.

CDPH does not actively enforce the C&D debris recycling requirements. It cannot determine the extent of contractors' compliance or identify contractors who do not follow the requirements. Furthermore, CDPH cannot calculate the C&D debris diversion rate and, thus, cannot include it in the Citywide diversion rate.²⁰

CDPH does not ensure that contractors recycle at least 50% by weight of the total amount of non-hazardous C&D debris their projects produce on site. The MCC requires contractors to submit documentation within 30 days of project completion. However, CDPH reported to OIG that it does not know the full population of projects subject to the requirements and cannot verify that all contractors required to submit forms have done so. When a contractor submits the required forms, CDPH staff complete a cursory review of the information to confirm that the reported numbers total correctly, and that the form states that contractors met the 50% recycling threshold, while entering it into a database. Beyond this cursory review, CDPH does not regularly check the accuracy of the submitted information and related documentation.

CDPH has not had any personnel dedicated to C&D debris recycling enforcement since 2018. Prior to that time, one employee was responsible for,

- identifying projects subject to the C&D debris recycling requirements;²¹
- identifying contractors who had not submitted documentation within the required 30-day timeframe;²² and
- issuing warnings and citations for non-compliance to contractors.

CDPH no longer undertakes these tasks. The MCC provides CDPH the additional option of notifying DOB of non-compliant contractors, enabling that department to withhold certificates of occupancy and building permits until the contractors come into compliance.²³ Despite the availability of this option, CDPH stated that it has not identified any non-compliance since 2018.

²⁰ The waste diversion rate—the percentage of generated waste that is diverted from landfills by recycling, reuse, composting, and other means—is a key performance indicator in any recycling program. Chicago's Citywide diversion rate is impacted not only by the lack of C&D debris recycling enforcement, but also the lack of enforcement of commercial and high-density residential recycling. City of Chicago Office of Inspector General, "Department of Streets and Sanitation Commercial and High-Density Residential Recycling Enforcement Audit," December 2, 2020, <https://igchicago.org/wp-content/uploads/2020/12/DSS-Commercial-and-High-Density-Recycling-Audit.pdf>.

²¹ Such projects were likely identified via reports that pulled data from the DOB data system, but current CDPH staff were not familiar with that process.

²² Former CDPH staff generated reports from Business Objects to identify non-compliant contractors

²³ Per the Department of Building's website, "A Certificate of Occupancy is issued by the Department of Buildings to certify that residential buildings with 4 or more units and larger non-residential buildings conform to the requirements of

Because CDPH does not have an active enforcement program, it cannot achieve the original purposes of the ordinance to promote the recycling of construction and demolition waste.

Additionally, because CDPH does not collect data which would allow it to report on contractors' performance in recycling C&D debris materials, CDPH cannot calculate C&D debris recycling amounts that would inform the City's waste diversion rate.²⁴ That rate serves as a key metric in efforts to improve the City's waste management under its Waste Strategy.

Regarding C&D debris recycling, the Waste Strategy specifically identified policy review and exploration as short-term priorities for 2021 and 2022. It stated that the City would assess C&D Recycling Ordinance compliance and identify opportunities to increase contractor education. The Waste Strategy also noted the opportunity for the City to create a strategy for on-site reuse of C&D debris, and stated that the City would seek to adjust the ordinance to establish targeted material types and parameters for reuse. Finally, the Waste Strategy acknowledged that not all contractors had provided the required reports and, thus, "it is impossible to identify the total volume of C&D waste generation."

| Recommendations

1. CDPH, in consultation with DOB, should develop a process to identify the population of projects subject to the MCC's C&D debris recycling requirements.
2. CDPH should document and implement procedures to ensure that contractors submit required recycling compliance documentation within 30 days of project completion.
3. CDPH should document and implement standardized procedures to review contractors' documentation and ensure that each contractor recycles at least 50% of C&D debris.
4. CDPH should develop and implement enforcement procedures, which may include warning contractors of non-compliance, issuing citations to non-compliant contractors, and, when appropriate, working with DOB to withhold relevant certificates of occupancy and/or building permits.
5. CDPH should develop procedures to calculate the C&D debris diversion rate and work with the chief sustainability officer to incorporate it into the calculation of the Citywide diversion rate.
6. CDPH should implement a process to periodically train contractors on the C&D debris recycling requirements, thus increasing contractor education as prioritized in the Waste Strategy; and
7. CDPH should work with the chief sustainability officer to develop procedures incentivizing or further requiring contractors to reuse materials by specifying materials and parameters, as prioritized in the Waste Strategy.

the Chicago Building Code." City of Chicago Department of Buildings, "Certificates of Occupancy." accessed May 26, 2023, https://www.chicago.gov/city/en/depts/bldgs/supp_info/certificate-of-occupancy.html.

²⁴ The Department of Streets and Sanitation is responsible for the enforcement of ordinances related to residential and commercial recycling. CDPH is responsible for enforcement of the ordinance related to construction and demolition debris recycling. The chief sustainability officer, per MCC § 2-31-040, has the responsibility "to develop policies and plans for waste reduction, diversion, and improved recycling policies and programs throughout the City [. . .]."

| Management Response²⁵

1. *"CDPH is working with DOB and AIS to develop a new process to identify the population of projects subject to the MCC's C&D debris recycling requirements. The information needed to extract construction, renovation and demolition projects subject to the MCC C&D debris recycling requirements is no longer available in DOB's permitting management system (Hansen 7). Once Hansen 7 has been upgraded such that integration with CDPH's permitting system (Hansen 11) is possible, anticipated in 2026, CDPH, DOB and AIS will develop the necessary query statements and filters to accurately pull the construction, renovation and demolition projects subject to the MCC.*

"In the meantime, CDPH was already in the process of procuring a web-based waste management tracking software solution, using American Recovery Plan dollars that were designated to enhance environmental data collection and analysis. CDPH has initiated the procurement process for this software solution and is currently establishing requirements with the vendor. All contractor contact information associated with projects permitted by the building department as new construction, renovation, and demolition will be extracted from Hansen 7 and uploaded to the web-based waste management tracking system. The contractors will be automatically contacted by the tracking system and will go through a short, online screening questionnaire. This screening mechanism will allow CDPH to identify the population of projects subject to the MCC's C&D debris recycling requirements until such time that DOB and CDPH's permitting systems are integrated.

"The timeline for implementation of this identification process is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system."

2. *"Due to limited staffing and increased responsibilities in areas that more directly affect human health, over the last five years the Department has focused more on other aspects of our environmental permitting and enforcement efforts.*

"CDPH will document and implement procedures and a new system to ensure that contractors submit their required recycling compliance documentation within 30 days of project completion as soon as the aforementioned web-based waste management tracking software solution is operational.

"This solution will notify contractors once their building permit is issued and instruct them to answer screening questions which will determine if the project is subject to the recycling compliance reporting requirements. The contractors will proceed to submit the required recycling compliance documentation via the web-based waste management tracking software if the project requires compliance reporting. This software will also send reminders to contractors when any submission deadline is approaching, as well as notify CDPH of those contractors who are out of compliance to trigger appropriate enforcement.

²⁵ The entire CDPH management response is attached as Appendix B

"CDPH will update all written procedures and guidelines related to C&D debris recycling when the web-based waste tracking system is operational. Additionally, CDPH will update the rules underlying the ordinance to reflect this change in how recycling documentation is to be submitted by contractors.

"The timeline for implementation of procedures to ensure that contractors submit required recycling compliance documentation within 30 days of project completion is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system."

- 3. "CDPH currently reviews all incoming contractors' documentation to ensure that each contractor has reported recycling at least 50% of the generated C&D debris. This is currently a paper-based system. Due to limited staffing over the past five years and the need to prioritize permitting and enforcement activities that more directly impact human health, we were only able to review documentation from contractors who self-reported this data.*

"Once CDPH's web-based waste management tracking system is operational, CDPH will be flagged automatically when a contractor is out of compliance with the 50% recycling requirement. CDPH will update all written procedures and guidelines related to C&D debris recycling at that time.

"Additionally, CDPH's new web-based waste management system will require contractors to enter their recycled and reused debris by weight and upload the supporting load tickets. CDPH will then implement standardized auditing procedures to verify that the reported data is consistent with the load tickets. CDPH will seek clarification from contractors whose projects are identified in this step as having discrepancies, such as data entry errors, IT problems, etc.,) and take enforcement action/issue warnings where violations are found.

"The ability to fully implement our standardized review and auditing procedures to review all contractors subject to the C&D debris recycling requirement documentation and ensure that all contractors recycle at least 50% of C&D debris is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system."

- 4. "CDPH already has enforcement procedures in place for contractors that submit the required recycling documentation. If the Environmental Engineer III who is currently reviewing the incoming documentation identifies a contractor who self-reports that they did not meet their 50% recycling requirement, a notice of violation is issued. Due to limited staffing over the past five years and the need to prioritize permitting and enforcement activities that more directly impact human health, we are only able to implement enforcement actions to those contractors who submit documentation to CDPH for review.*

"Until CDPH's web-based waste management tracking system is operational, we will continue to manually review the incoming paper-based recycling documentation submitted by contractors for compliance and issue warnings, notices of violation and/or work with DOB to withhold relevant certificates of occupancy and/or future building permits.

"Once CDPH's web-based waste management tracking system is operational, CDPH will be flagged automatically if a contractor is out of compliance with the 50% recycling requirement and will issue warnings, notices of violation and/or work with DOB to withhold relevant certificates of occupancy and/or future building permits. CDPH will be updating all written procedures and guidelines related to C&D debris recycling when the web-based waste tracking system is operational.

"The ability to fully implement enforcement activities for all contractors who are not recycling at least 50% of C&D debris is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system."

5. *"Due to limited staffing and increased responsibilities in areas that more directly affect human health, CDPH has not recently calculated diversion rates on a regular basis.*

"CDPH's forthcoming web-based waste management tracking system has built in dashboards that calculate diversion rates automatically as contractors input their recycling documentation into the system. CDPH will work with the Chief Sustainability Officer (CSO) to ensure the standard calculation(s) meet the City's needs, and if not, work with the software vendor to customize diversion rate(s) as needed. CDPH will include diversion rate calculation procedures and guidelines in our overall C&D debris recycling procedure and guidelines when the web-based waste tracking system is operational.

"The ability to calculate diversion rates is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component and diversion rates, if needed by the CSO; and (3) AIS and CDPH to establish a process to send data extracted from Hansen 7 to the web-based waste management tracking system."

6. *"Currently, CDPH has a training presentation on C&D debris recycling on our website for contractors to reference. When the C&D debris recycling ordinance was updated in 2007, CDPH conducted training sessions for contractors. Due to limited staffing in the past five years and the prioritization of permitting and enforcement activities that more directly impact human health, CDPH has not recently hosted training sessions for construction contractors.*

"CDPH will work with our web-based waste management tracking system software vendor to develop and conduct online training tutorials and materials for contractors that will cover C&D debris recycling requirements as well as the new system for submitting recycling documentation. Training and materials will be available when the new waste management system is released for use.

"The ability to train contractors on the new waste tracking system is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component, training tutorials and materials; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system."

7. *"CDPH will work with the Chief Sustainability Officer to explore operational procedures to incentivize recycling and reuse of materials, and additional requirements such as deconstruction."*

Finding #2: The City has not created the construction/demolition debris management fund required by the MCC.

Between January 1, 2017, and July 1, 2021, the City collected C&D debris fees of nearly \$1.2 million. It did not, however, deposit the fees into a dedicated construction/demolition debris management fund, as required by ordinance. MCC § 11-4-1961 imposes a fee on the generation of construction or demolition debris. MCC § 11-4-1962 requires a construction/demolition debris management fund which is “constituted from the fees and fines collected [...]” Section 11-4-1962 states that,

The fund is to be utilized for the regulation of construction or demolition debris, which may include monitoring, planning, inspecting, technical assistance, and enforcing rules, regulations and ordinances related to the management, transportation, disposal, recycling and characterization of C&D debris.

Rather than depositing the relevant funds into a dedicated fund, the City deposited them into its general operating fund, the Corporate Fund. In the absence of a dedicated fund, the City does not have a mechanism to ensure it spends these specific funds to regulate C&D debris. The City is, as a result, both out of compliance with its legal obligations and limited in its ability to appropriately meet C&D recycling objectives.

| Recommendations

1. CDPH should work with other relevant departments to develop and implement procedures to ensure that fees collected from the generation of C&D debris and fines collected for noncompliance are deposited into the required dedicated construction/demolition debris management fund, and that the fund is used to regulate C&D debris.

| Management Response


1. *“CDPH will work with the relevant City departments to develop and implement procedures for fees collected from the generation of C&D debris and fines collected for noncompliance to be deposited into the required dedicated construction/demolition debris management fund that can then be used to support dedicating staffing and sustain the usage of a web-based waste management tracking software solution.”*

V | Conclusion

OIG concluded that CDPH does not ensure that contractors comply with C&D debris recycling requirements. CDPH cannot determine the extent of contractors' compliance or identify contractors who do not follow the requirements. Nor can CDPH calculate the C&D debris recycling rate for inclusion in a Citywide diversion rate. Additionally, the City does not meet the MCC requirements related to expenditures from the construction/demolition debris management fund. The City, therefore, cannot determine whether it used the \$1,192,550.21 collected between January 1, 2017, and July 1, 2021, in a manner that complies with the MCC.

Appendix A | Recycling Compliance Documentation

The following is an example of the recycling compliance documentation that contractors must submit to CDPH. Identifying information is redacted.



**CITY OF CHICAGO
CONSTRUCTION AND DEMOLITION DEBRIS LOG AND
WASTE HAULER/RECYCLER AFFIDAVIT**

**CITY OF CHICAGO
DEPARTMENT OF PUBLIC HEALTH
PERMITTING AND INSPECTORS**

OCT 13 2021

| | |
|------------------------|---|
| Hauler/Recycler Name | Hauler/Recycler Street Address |
| License/Permit Number | City State Zip Code |
| Contact Name and Title | Construction/Demolition jobsite address |
| Telephone Number | Construction/Demolition job number |

| Date | Box/ Truck # | Contents | Destination | C&D Debris Accepted (tons) |
|----------------------|-----------------|--------------------------------|------------------------------------|----------------------------------|
| Example: 03/27/06 | Example: 123 | Example: Concrete & asphalt | Example: Any Recycling Facility | Example: 56.30 tons |
| 9/28/20 | 162148 | Brick, Hard, Drywall | Citywide | 10.66 |
| 9/25/20 | 34484 | Brick, Hard, Drywall | Citywide | 16.44 |
| 9/26/20 | 162643 | Brick, Hard, Drywall | Citywide | 14.28 |
| 9/26/20 | 162129 | Brick, Hard, Drywall | Citywide | 17.73 |
| 9/26/20 | 162126 | Brick, Hard, Drywall | Citywide | 12.35 |
| 9/26/20 | 162127 | Brick, Hard, Drywall | Citywide | 11.17 |
| 9/26/20 | 162128 | Brick, Hard, Drywall | Citywide | 10.95 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

(Attach additional sheets if necessary, then sign below.) Total: 93.58

I hereby certify, under penalty of perjury, that the above C&D Debris Log is true and accurate.

Signature: _____
Name: _____ Title: _____
Date: 9/30/20

Notary Public: _____



CITY OF CHICAGO
CONSTRUCTION & DEMOLITION DEBRIS RECYCLING
COMPLIANCE FORM

This is a construction project / demolition project. (Check one.)

(Please see the instructions on page 4.)

| Contractor Information | Construction/Demolition Site Information |
|---|---|
| Name <u>[redacted]</u> Contractor | <u>[redacted]</u> Address of Project Site |
| City License Number <u>[redacted]</u> Contractor | <u>[redacted]</u> Building/Demolition Permit Number |
| <u>[redacted]</u> Street Address | <u>[redacted]</u> Project |
| City <u>[redacted]</u> State <u>[redacted]</u> Zip Code <u>[redacted]</u> | Completion Date <u>26, 775 W. L. Pt</u> |
| <u>[redacted]</u> Telephone Number | Size of Project (square feet of all floors) <u>[redacted]</u> |
| Contact Name and Title <u>[redacted]</u> | Project Manager's Name & Telephone Number <u>[redacted]</u> |
| | Property Owner's Name & Telephone Number <u>[redacted]</u> |

Construction and Demolition Debris Information

| C&D Debris Weight Information | Recycled C&D Debris Information |
|---|---|
| 1) <u>93.58</u> Tons of all C&D debris produced on site (This amount must match the total on page 2.) minus: | 4) <u>83.93</u> Tons of C&D debris recycled/reused off site (Completed Waste Hauler/Recycler Affidavit(s) must be attached to account for all debris taken to a recycler.) plus: |
| 2) <u>0</u> Tons of contaminated C&D debris (with asbestos or other hazardous material) equals: | 5) <u>0</u> Tons of on-site reprocessed C&D debris used on site (Copy of DOE construction site reprocessing authorization must be attached if debris was crushed on site.) equals: |
| 3) <u>93.58</u> Total amount of recyclable C&D debris (List this amount on page 3, line "B.") | 6) <u>83.93</u> Total amount of recycled/reused C&D debris (List this amount on page 3, line "A.") |

NOTE: Pursuant to Section 11-4-1905(4) of the Chicago Municipal Code, all contractors are subject to audit to verify compliance. All documentation that supports this form (such as weight tickets and receipts) must be retained for no less than three years from the date that this form is filed.

CITY OF CHICAGO - C&D DEBRIS RECYCLING COMPLIANCE FORM

PAGE 2

Breakdown of all C&D Debris Product on Site

| C&D Debris Type. | On site Reused (tons)* | Off Site Reused/Recycled (tons)* | Off Site Disposed (tons)* |
|--|------------------------|----------------------------------|---------------------------|
| Bricks | | 9.51 | |
| Concrete | | | |
| Masonry materials (cinder blocks, mortar etc.) | | | |
| Rock, stone, gravel | | | |
| Soil, dirt | | | 9.65 |
| Sand | | | |
| Reclaimed asphalt pavement | ----- | | |
| Wood | ----- | 58.85 | |
| Ferrous metal (iron, steel etc.) | ----- | 5.34 | |
| Nonferrous metal (copper wiring etc.) | ----- | | |
| Plaster | ----- | | |
| Gypsum drywall | ----- | 10.23 | |
| Paint | ----- | | |
| Plumbing fixtures and piping | ----- | | |
| Carpet and Pad | ----- | | |
| Non-asbestos insulation | ----- | | |
| Roofing shingles & other roof coverings | ----- | | |
| Cardboard, paper, packaging | ----- | | |
| Plastics | ----- | | |
| Glass | ----- | | |
| Landscape debris | ----- | | |
| Hazardous materials (please specify): | ----- | ----- | |
| Other (please specify): | | | |
| Subtotals: | 0 | 83.93 | 9.65 ** |

Total of all C&D debris produced on site (sum of the above 3 columns): 93.58

*If weight measurements are not available, convert volume to weight and retain documentation to support the accuracy of the converted measurement.

**Waste Hauler/Recycler affidavits must be attached to account for the amount of C&D debris recycled or disposed of off-site. To account for C&D debris reused on or off site, the contractor must provide supporting documentation upon request by the Dept. of Public Health.

CITY OF CHICAGO - C&D DEBRIS RECYCLING COMPLIANCE FORM

PAGE 3

Calculation of Recycling Percentage

A) Total amount of Recycled/Reused C&D debris 83.93 tons (from line 6, page 1)

B) Total amount of Recyclable C&D debris 93.58 tons (from line 3, page 1)

If Line B is zero, skip to Contractor Affidavit on page 4.

C) Percent of C&D debris Recycled 90% percent (divide A by B and multiply by 100)

| | |
|--|-------------------|
| Example: | |
| A. Total amount of Recycled/Reused C&D debris..... | <u>2,025</u> tons |
| B. Total amount of Recyclable C&D debris | <u>5,700</u> tons |
| $2,025 \div 5,700 = 0.36$ (rounded to the nearest hundredth) | |
| $0.36 \times 100 = 36$ | |
| C. Percent of C&D debris Recycled | <u>36</u> percent |

If Line C is 50% or greater, skip to Contractor Affidavit on page 4; if not, go to Line E.

D) Percent required to be recycled (for 2007) 50 percent E) Line D
(50) minus line C (if less than 50)..... _____ percent

F) Multiply line E by:

\$1,000 - if project space is 10,000 square feet or more

-or-

\$500 - if project space is less than 10,000 square feet

Total penalty _____ dollars

If a penalty is owed, make payment to: *City of Chicago Department of Finance*
(City Hall, 121 N. LaSalle, Room 107A)

**Staple original receipt here:
(Please keep a copy for your records.)

For Department of Finance use only:

Funds Code: **EB58 100-72-3035-2713 Ordinance 11-4-1905 Penalties**

CITY OF CHICAGO - C&D DEBRIS RECYCLING COMPLIANCE FORM

PAGE 4

Election Form And Contractor Affidavit

Select one option, then sign the affidavit below before a Notary Public.

I have complied with the recycling requirements set forth in Section 11-4-1905 of The Chicago Environmental Protection and Control Ordinance; and all the information provided herein and attached hereto is correct.

Or

I have paid the penalty calculated on page 3; all the information provided herein and attached hereto is correct; and I will not contest this penalty.

Or

I have completed this form in full; all the information provided herein and attached hereto is correct; and I hereby request a hearing on the applicability of Section 11-4-1905 and/or the amount of penalty due. (You will receive a notice by mail, specifying the date, time, and location of the hearing).

[Redacted Signature] Signature
[Redacted Name] Name
[Redacted Title] Title



Date 9/30/20


[Redacted Notary Name] Notary Public

INSTRUCTIONS

- 1) Complete this 4-page compliance form and sign before a Notary Public.
- 2) Attach one or more signed and notarized Waste Hauler/Recycler Affidavits.
- 3) Attach a Construction Site Reprocessing Authorization letter from the Department of Public Health, if applicable.
- 4) Attach a receipt from the Department of Finance, if a penalty was paid.
- 5) Return forms to the environment desk at DOB, Room 906, City Hall, 121 N. LaSalle Street, within 30 days from project completion or email forms to cdphpermits@cityofchicago.org

If you have any questions about this form, please call 312-745-7206.

Appendix B | Complete Management Response



OFFICE OF INSPECTOR GENERAL
City of Chicago

4750

740 N. Sedgwick Street, Suite 200
Chicago, Illinois 60654
Telephone: (773) 473-7799
Fax: (773) 473-3949

Management Response Form

Project Title: CDPH Construction and Demolition Debris Recycling Project Number: 20-1562

Department Name: Chicago Department of Public Health Date: 5/26/2023

Department Head: Dr. Allison Arwady

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|---|--------------------|---|---|-----------------------|
| <p>1. CDPH, in consultation with DOB, should develop a process to identify the population of projects subject to the MCC's C&D debris recycling requirements.</p> | <p>Agree</p> | <p>CDPH is working with DOB and AIS to develop a new process to identify the population of projects subject to the MCC's C&D debris recycling requirements. The information needed to extract construction, renovation and demolition projects subject to the MCC C&D debris recycling requirements is no longer available in DOB's permitting management system (Hansen 7). Once Hansen 7 has been upgraded such that integration with CDPII's permitting system (Hansen 11) is possible, anticipated in 2026, CDPH, DOB and AIS will develop the necessary query statements and filters to accurately pull the construction, renovation and demolition projects subject to the MCC.</p> | <p>December 2024, based on estimated roll-out of web-based waste management tracking system</p> | <p>CDPH, AIS, DOB</p> |

Page 1 of 9

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|--------------------|--------------------|--|-------------------------------|----------------------|
| | | <p>In the meantime, CDPH was already in the process of procuring a web-based waste management tracking software solution, using American Recovery Plan dollars that were designated to enhance environmental data collection and analysis. CDPH has initiated the procurement process for this software solution and is currently establishing requirements with the vendor. All contractor contact information associated with projects permitted by the building department as new construction, renovation, and demolition will be extracted from Hansen 7 and uploaded to the web-based waste management tracking system. The contractors will be automatically contacted by the tracking system and will go through a short, online screening questionnaire. This screening mechanism will allow CDPH to identify the population of projects subject to the MCC's C&D debris recycling requirements until such time that DOB and CDPH's permitting systems are integrated.</p> <p>The timeline for implementation of this identification process is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process, (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system.</p> | | |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|---|--------------------|---|---|----------------------|
| <p>2. CDPH should document and implement procedures to ensure that contractors submit required recycling compliance documentation within 30 days of project completion.</p> | <p>Agree</p> | <p>Due to limited staffing and increased responsibilities in areas that more directly affect human health, over the last five years the Department has focused more on other aspects of our environmental permitting and enforcement efforts.</p> <p>CDPH will document and implement procedures and a new system to ensure that contractors submit their required recycling compliance documentation within 30 days of project completion as soon as the aforementioned web-based waste management tracking software solution is operational.</p> <p>This solution will notify contractors once their building permit is issued and instruct them to answer screening questions which will determine if the project is subject to the recycling compliance reporting requirements. The contractors will proceed to submit the required recycling compliance documentation via the web-based waste management tracking software if the project requires compliance reporting. This software will also send reminders to contractors when any submission deadline is approaching, as well as notify CDPH of those contractors who are out of compliance to trigger appropriate enforcement.</p> <p>CDPH will update all written procedures and guidelines related to C&D debris recycling when the web-based waste tracking system is operational.</p> | <p>December 2024, based on estimated roll-out of web-based waste management tracking system</p> | <p>CDPH, AIS</p> |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|--|--------------------|---|---|----------------------|
| | | <p>Additionally, CDPH will update the rules underlying the ordinance to reflect this change in how recycling documentation is to be submitted by contractors.</p> <p>The timeline for implementation of procedures to ensure that contractors submit required recycling compliance documentation within 30 days of project completion is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system.</p> | | |
| <p>3. CDPH should document and implement standardized procedures to review contractors' documentation and ensure that each contractor recycles at least 50% of C&D debris.</p> | <p>Agree</p> | <p>CDPH currently reviews all incoming contractors' documentation to ensure that each contractor has reported recycling at least 50% of the generated C&D debris. This is currently a paper-based system. Due to limited staffing over the past five years and the need to prioritize permitting and enforcement activities that more directly impact human health, we were only able to review documentation from contractors who self-reported this data</p> <p>Once CDPH's web-based waste management tracking system is operational, CDPH will be flagged automatically when a contractor is out of compliance with the 50% recycling requirement. CDPH will update all written procedures and guidelines related to C&D debris recycling at that time.</p> | <p>December 2024, based on estimated roll-out of web-based waste management tracking system</p> | <p>CDPH, AIS</p> |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|--|--------------------|---|---|----------------------|
| | | <p>Additionally, CDPH's new web-based waste management system will require contractors to enter their recycled and reused debris by weight and upload the supporting load tickets. CDPH will then implement standardized auditing procedures to verify that the reported data is consistent with the load tickets. CDPH will seek clarification from contractors whose projects are identified in this step as having discrepancies, such as data entry errors, IT problems, etc.) and take enforcement action/issue warnings where violations are found.</p> <p>The ability to fully implement our standardized review and auditing procedures to review all contractors subject to the C&D debris recycling requirement documentation and ensure that all contractors recycle at least 50% of C&D debris is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component, and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system.</p> | | |
| 4. CDPH should develop and implement enforcement procedures, which may include warning contractors of non-compliance, issuing citations to | Agree | CDPH already has enforcement procedures in place for contractors that submit the required recycling documentation. If the Environmental Engineer III who is currently reviewing the incoming documentation identifies a contractor who self-reports that they did | December 2024, based on estimated roll-out of web-based | CDPH, AIS |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|---|--------------------|--|---|----------------------|
| <p>non-compliant contractors, and, when appropriate, working with DOB to withhold relevant certificates of occupancy and/or building permits.</p> | | <p>not meet their 50% recycling requirement, a notice of violation is issued. Due to limited staffing over the past five years and the need to prioritize permitting and enforcement activities that more directly impact human health, we are only able to implement enforcement actions to those contractors who submit documentation to CDPH for review.</p> <p>Until CDPH's web-based waste management tracking system is operational, we will continue to manually review the incoming paper-based recycling documentation submitted by contractors for compliance and issue warnings, notices of violation and/or work with DOB to withhold relevant certificates of occupancy and/or future building permits.</p> <p>Once CDPH's web-based waste management tracking system is operational, CDPH will be flagged automatically if a contractor is out of compliance with the 50% recycling requirement and will issue warnings, notices of violation and/or work with DOB to withhold relevant certificates of occupancy and/or future building permits. CDPH will be updating all written procedures and guidelines related to C&D debris recycling when the web-based waste tracking system is operational.</p> <p>The ability to fully implement enforcement activities for all contractors who are not recycling at least 50% of C&D debris is dependent upon the time for: (1)</p> | <p>waste management tracking system</p> | |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|--|--------------------|--|--|----------------------|
| | | CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component; and (3) AIS and CDPH to establish an automated process to send data extracted from Hansen 7 to the web-based waste management tracking system. | | |
| 5. CDPH should develop procedures to calculate the C&D debris diversion rate and work with the chief sustainability officer to incorporate it into the calculation of the Citywide diversion rate. | Agree | <p>Due to limited staffing and increased responsibilities in areas that more directly affect human health, CDPH has not recently calculated diversion rates on a regular basis.</p> <p>CDPH's forthcoming web-based waste management tracking system has built in dashboards that calculate diversion rates automatically as contractors input their recycling documentation into the system. CDPH will work with the Chief Sustainability Officer (CSO) to ensure the standard calculation(s) meet the City's needs, and if not, work with the software vendor to customize diversion rate(s) as needed. CDPH will include diversion rate calculation procedures and guidelines in our overall C&D debris recycling procedure and guidelines when the web-based waste tracking system is operational</p> <p>The ability to calculate diversion rates is dependent upon the time for. (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component and</p> | December 2024, based on estimated roll-out of web-based waste management tracking system | CDPH, AIS, CSO |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|---|--------------------|--|--|----------------------|
| | | diversion rates, if needed by the CSO; and (3) AIS and CDPH to establish a process to send data extracted from Hansen 7 to the web-based waste management tracking system. | | |
| 6. CDPH should implement a process to periodically train contractors on the C&D debris recycling requirements, thus increasing contractor education as prioritized in the Waste Strategy. | Agree | <p>Currently, CDPH has a training presentation on C&D debris recycling on our website for contractors to reference. When the C&D debris recycling ordinance was updated in 2007, CDPH conducted training sessions for contractors. Due to limited staffing in the past five years and the prioritization of permitting and enforcement activities that more directly impact human health, CDPH has not recently hosted training sessions for construction contractors.</p> <p>CDPH will work with our web-based waste management tracking system software vendor to develop and conduct online training tutorials and materials for contractors that will cover C&D debris recycling requirements as well as the new system for submitting recycling documentation. Training and materials will be available when the new waste management system is released for use.</p> <p>The ability to train contractors on the new waste tracking system is dependent upon the time for: (1) CDPH to purchase the software through the City of Chicago IT procurement process; (2) the vendor to develop the needed customization of the software for the screening component, training tutorials and materials; and (3) AIS and CDPH to establish an</p> | December 2024, based on estimated roll-out of web-based waste management tracking system | CDPH, AIS |

| OIG Recommendation | Agree/ Disagree | Department's Proposed Action | Implementation Target Date | Party Responsible |
|---|--------------------|--|-------------------------------|----------------------|
| | | automated process to send data extracted from Hansen 7 to the web-based waste management tracking system. | | |
| 7. CDPH should work with the chief sustainability officer to develop procedures incentivizing or further requiring contractors to reuse materials by specifying materials and parameters, as prioritized in the Waste Strategy. | Agree | CDPH will work with the Chief Sustainability Officer to explore operational procedures to incentivize recycling and reuse of materials, and additional requirements such as deconstruction | December 2024 | CDPH, CSO |
| 1. CDPH should work with other relevant departments to develop and implement procedures to ensure that fees collected from the generation of C&D debris and fines collected for noncompliance are deposited into the required dedicated construction/demolition debris management fund, and that the fund is used to regulate C&D debris. | Agree | CDPH will work with the relevant City departments to develop and implement procedures for fees collected from the generation of C&D debris and fines collected for noncompliance to be deposited into the required dedicated construction/demolition debris management fund that can then be used to support dedicating staffing and sustain the usage of a web-based waste management tracking software solution. | January 2025 | CDPH, OBM, DOF |



Samuel Díaz
Senior Performance Analyst

Matthew Jacobson
Senior Performance Analyst

Kathleen O'Donovan
Chief Performance Analyst

Darwyn Jones
Deputy Inspector General, Audit & Program Review

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For further information about this report, please contact the City of Chicago Office of Inspector General, 740 N. Sedgwick Ave., Suite 200, Chicago, IL 60654, or visit our website at igchicago.org.

Talk to Us
(833) TALK-2-IG/(833) 825-5244
talk2ig@igchicago.org
igchicago.org/talk2ig

OIG Business Office
(773) 478-7799

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