UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

COMMISSION FILE NO. 001-34223

CLEAN HARBORS, INC.

(Exact name of registrant as specified in its charter)

Massachusetts	**04-2997780**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
42 Longwater Drive Norwell MA	**02061-9149**
(Address of Principal Executive Offices)	(Zip Code)

Registrant’s Telephone Number, Including area code: **(781) 792-5000**

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.01 par value	CLH	New York Stock Exchange

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding twelve months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

On June 30, 2020 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of the voting and non-voting common stock of the registrant held by non-affiliates of the registrant was approximately $3.1 billion, based on the closing price of such common stock as of that date on the New York Stock Exchange. Reference is made to Part III of this report for the assumptions on which this calculation is based.

On February 17, 2021, there were outstanding 54,796,559 shares of Common Stock, $0.01 par value.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive proxy statement for its 2021 annual meeting of stockholders (which will be filed with the Commission not later than April 23, 2021) are incorporated by reference into Part III of this report.

CLEAN HARBORS, INC.

ANNUAL REPORT ON FORM 10-K

YEAR ENDED DECEMBER 31, 2020

TABLE OF CONTENTS

Disclosure Regarding Forward-Looking Statements

In addition to historical information, this Annual Report on Form 10-K contains forward-looking statements, which are generally identifiable by use of the words "believes," "expects," "intends," "anticipates," "plans to," "seeks," "should," "estimates," "projects," "may," "likely" or similar expressions. Such statements may include, but are not limited to, statements about future financial and operating results, the Company's plans, objectives, expectations and intentions and other statements that are not historical facts. Forward-looking statements are neither historical facts nor assurances of future performance. Such statements are based upon the beliefs and expectations of Clean Harbors' management as of this date only and are subject to certain risks and uncertainties that could cause actual results to differ materially, including, without limitation, the risks and uncertainties surrounding the coronavirus pandemic and the related impact on our business, and those items identified in this report under Item 1A, "Risk Factors," and Item 7, "Management's Discussion and Analysis on Financial Condition and Results of Operations." Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's opinions only as of the date hereof. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements. Readers should also carefully review the risk factors described in the other documents which we file from time to time with the Securities and Exchange Commission ("SEC"), including Clean Harbors' quarterly reports on Form 10-Q to be filed during 2021.

PART I

ITEM 1. BUSINESS

General

Clean Harbors, Inc. and its subsidiaries (collectively, "we," "Clean Harbors" or the "Company") is a leading provider of environmental and industrial services throughout North America. We are also the largest re-refiner and recycler of used oil in North America and the largest provider of parts cleaning and related environmental services to commercial, industrial and automotive customers in North America. Everywhere industry meets the environment, we strive to provide eco-friendly products and services that protect and restore North America's natural environment. One of our primary goals as a Company is supporting our customers in providing environmentally responsible solutions to further their sustainability goals in today's world.

We have two operating segments; (i) the Environmental Services segment and (ii) the Safety-Kleen segment.

- **Environmental Services** - Environmental Services segment results are predicated upon the demand by our customers for waste services directly attributable to waste volumes generated by them and project work for which waste handling and/or disposal is required. In managing the business and evaluating performance, management tracks the volumes and mix of waste handled and disposed of through our incinerators, treatment, storage and disposal facilities ("TSDFs") and landfills, as well as utilization of such incinerators, labor and billable hours and equipment among other key metrics. Levels of activity and ultimate performance associated with this segment can be impacted by several factors including overall U.S. GDP and U.S. industrial production, weather conditions, efficiency of our operations, technology, changing regulations, competition, market pricing of our services and the management of our related operating costs. Environmental Services results are also impacted by the demand for planned and unplanned industrial related cleaning and maintenance services at customer sites and for environmental cleanup services on a scheduled or emergency basis, including response to national events such as major chemical spills, natural disasters or other events where immediate and specialized services are required. As a result of the recent coronavirus ("COVID-19") pandemic, the business has also seen increased demand for contagion disinfection, decontamination and disposal response services.

- **Safety-Kleen** - Safety-Kleen segment results are impacted by an array of core service and product offerings that serve to attract small quantity waste producers as customers and integrate them into the Clean Harbors waste network. Core service offerings include parts washer services, containerized waste services, vac services, used motor oil collection and contract blending and packaging services. Key performance indicators tracked by the Company relative to these services include the number of parts washers placed and services performed and pricing and volume of used motor oil and waste collected. Results from these services are primarily driven by the overall number of parts washers placed and services performed at customer sites and volumes of waste collected, as well as the demand for and frequency of other offered services. These factors can be impacted by overall economic conditions in the marketplace, especially in the automotive and manufacturing related areas. Both the overall market price of oil and regulations that change the number of potential outlets for used motor oil, including the International Maritime Organization's 2020 regulation, impact the premium the segment can charge for used motor oil collections. In addition to its core service offerings, Safety-Kleen also offers high quality, eco-friendly recycled base and blended oil products to end users including fleet customers, distributors and manufacturers of oil products. Other product offerings include automotive related fluids and shop supplies. Relative to its oil related products, management tracks the Company's volumes and relative percentages of base and blended oil sales along with various pricing metrics associated with this commodity driven marketplace. The segment’s revenues are significantly impacted by overall market pricing and product mix associated with base and blended oil products. The segment's results are impacted by the Company's ability to manage the pricing for used oil collections with the overall market pricing for base and blended oil products. Costs incurred in connection with the collection of used oil and other raw materials associated with the segment’s oil related products can also fluctuate. Our OilPlus® closed loop initiative, which results in the sale of our renewable oil products directly to our end customers, may also be impacted by changes in customer demand for high-quality, environmentally responsible recycled oil.

Clean Harbors, Inc. was incorporated in Massachusetts in 1980 and our principal executive offices are located in Norwell, Massachusetts. We maintain a website at the following Internet address: http://www.cleanharbors.com. Through a link on this website, we provide free access to our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after electronic filing with the SEC. Our guidelines on corporate governance, the charters for our board committees and our code of ethics for members of the board of directors, our chief executive officer and our other senior officers are also available on our website, and we will post on our website any waivers of, or amendments to, such code of ethics. We have published our inaugural Corporate Sustainability Report, which is available at the Investor Relations section of our website under "ESG". Our website and the information contained therein or connected thereto are not incorporated by reference into this annual report on Form 10-K.

Health and Safety

Health and Safety is our #1 core value. Employees at all levels of our Company share this philosophy and are committed to ensuring our safety goals are met. Our commitment to health and safety benefits all of our stakeholders including our employees, our customers, the community and the environment. We finished the eighth year of our *Safety Starts with Me: Live It 3-6-5* program, which is a key component in our overall safety approach. This program, along with other targeted safety programs, have enabled us to maintain better safety metrics as compared to the years prior to their implementation. Our key safety metrics are Total Recordable Incident Rate, or "TRIR" and Days Away, Restricted Activity and Transfer Rate, or "DART". For the year ended December 31, 2020, our Company wide TRIR and DART were 1.15 and 0.72, respectively.

In order to protect our employees, lower our incident rates and satisfy our customers' demands to retain the best service providers with the lowest TRIR and DART rates, we are fully committed to continuously improving our health and safety performance through ongoing safety initiatives and training as well as technological solutions aimed at keeping all of our employees safe. All employees recognize the importance of protecting themselves, their fellow employees, their customers and all those around them from harm. Our commitment is supported by the *Safety Starts with Me: Live It 3-6-5* program, which includes three Safety philosophies, six Golden Rules of Safety and each employee’s five personal reasons why they choose to be safe at work, on the road and at home.

Our commitment to ensuring the health and safety of our employees was paramount in 2020 when reacting to COVID-19's impact on our Company and our employees. For more detailed discussion on our corporate response to the COVID-19 pandemic, including our commitment to the health and safety of our employees, refer to "*Impacts of COVID-19"* under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this report.

Compliance

We regard compliance with applicable regulations as a critical component of our overall operations. We strive to maintain the highest professional standards in our compliance activities. Our compliance staff is responsible for the facilities' permitting and regulatory compliance, compliance training, transportation compliance and related record keeping. To ensure the effectiveness of our regulatory compliance program, our compliance staff monitors our facilities.

Our facilities are frequently inspected and audited by regulatory agencies, as well as by customers. Although our facilities have been cited on occasion for regulatory violations, we believe that each of our facilities is currently in substantial compliance with applicable permit requirements. We also perform periodic audits and inspections of the disposal facilities we utilize which are owned by other companies.

Strategy

Our strategy is to develop and maintain ongoing relationships with a diversified group of customers that have recurring needs for our products and services. We seek to expand market awareness of the breadth of our service offerings to current and future customers through targeted marketing opportunities. We strive to be recognized as the premier supplier of a broad range of value-added environmental services based upon quality, responsiveness, customer service, information technologies and cost effectiveness. We aim to be a resource for our customers everywhere that industry meets the environment.

The principal elements of our business strategy in no particular order are:

- **Cross-Sell Across Businesses** - We believe the breadth of our service offerings allows us to provide additional services to existing and new customers in order to continually satisfy our customers environmental and sustainability objectives. We believe we can provide industrial and field services to customers that traditionally have only used our technical services and provide technical services to customers that use our industrial services. At the same time, there are a variety of cross-selling opportunities between our Environmental Services and Safety-Kleen segments. Reflecting this strategy, we have been successfully cross-selling our Environmental Services waste disposal services to our Safety-Kleen customers and cross-selling the products and services of Safety-Kleen, such as parts washers, various recycling services, cleaning products, and our OilPlus® products through our closed loop initiative, to Environmental Services customers. We believe leveraging our ability to cross-sell across our segments will drive additional revenue for our Company.

- **Capture Large-Scale Projects** - We provide turnkey offsite transportation and landfill or incineration disposal services for soil and other contaminated materials generated from remediation activities. We also assist remediation contractors and project managers with support services including groundwater disposal, waste disposal, roll-off container management and many other related services. We believe this will drive incremental waste volume to our existing facilities, thereby increasing utilization and enhancing overall profitability.

- **Expand Throughput Capacity of Existing Facilities** - We operate and have made substantial investments in an extensive network of hazardous waste management facilities and oil re-refineries, which provide us with significant operating leverage as volumes increase. In addition, there are opportunities to expand waste handling capacity or waste oil processing at these facilities by modifying the terms of the existing permits and by adding equipment and new technology. Through selected permit modifications, we can expand the range of treatment services offered to our customers without the significant capital investment necessary to acquire or build new waste management facilities.

- **Execute Strategic Acquisitions and Divestitures** - We actively pursue selective acquisitions with certain services or market sectors where we believe the acquisitions can enhance and expand our business. We believe that we can expand existing services through strategic acquisitions in order to generate incremental revenues from existing and new customers and to obtain greater market share. In order to maximize synergies, we rapidly integrate our acquisitions into our existing processes. To complement our acquisition strategy, we regularly review and evaluate our existing operations to determine whether our business model should change through the divestiture of certain businesses. Accordingly, from time to time, we divest certain non-core businesses and reallocate our resources to businesses that we believe better align with our long-term strategic direction. For additional information on our acquisitions and divestitures, see "Acquisitions and Divestitures" below.

- **Focus on Cost, Pricing and Productivity Initiatives** - We continually seek to increase efficiency, reduce costs through enhanced technology, process improvements and strategic expense management and price our goods and services competitively. For instance, in 2020, we successfully undertook site consolidations and increased leverage of our employee and asset bases to reduce subcontractor, transportation and equipment rental costs. Additionally, we seek to identify areas in our business where strategic investments in automation, process improvements, tools and employees can serve to increase productivity, efficiency and safety compliance.

- **Expand Geographic Coverage of Service Offerings** - We believe our Environmental Services and Safety-Kleen segments have a competitive advantage due to their vast network of locations across North America, particularly in areas where we maintain service locations at or near a TSDF. By opening additional service locations in strategic locations, we believe that we can increase our market share within these segments, which will drive additional waste into our network of facilities and increase overall profitability. In addition, our management team continues to assess the competitive landscape in order to identify new business opportunities.

Acquisitions and Divestitures

Acquisitions are an element of our business strategy that involve expansion through the purchase of businesses that complement our existing Company and create opportunities for profitable growth.

In 2020, we acquired a privately-owned business for a purchase price of $8.8 million. The acquisition expands the Safety-Kleen segment's oil re-refining operations to the northeast United States.

In 2019, we acquired two privately-owned businesses for a combined purchase price of $25.2 million. One acquisition expands the environmental services and hazardous materials management services of the Environmental Services segment while the second complements the Safety-Kleen segment's core service offerings, such as used motor oil collection, parts washers, oil filter recycling and vacuum services.

In 2018, we acquired the U.S. Industrial Cleaning Business of Veolia Environmental Services North America LLC (the "Veolia Business") as well as a privately-owned company for a combined purchase price of $151.2 million. The acquisitions provide significant scale and industrial services capabilities, while increasing the size of our existing U.S. Industrial Services business. The acquisitions were financed with cash on hand. The Veolia Business is included in our Environmental Services segment while the privately-owned company has components included in both the Environmental Services and Safety-Kleen segments.

For additional information relating to our acquisition activities during 2020, 2019 and 2018, see Note 4, "Business Combinations," to our consolidated financial statements included in Item 8 of this report.

Other business transactions include divestitures based on our ongoing review of portfolio assets to determine the extent to which they are contributing to our objectives and growth strategy.

Protecting the Environment and Sustainability

Clean Harbors recognizes that sustainability stewardship is a core aspect of our brand and an important part of our responsibility in protecting generations to come through balancing environmental, economic and social concerns. Sustainability is not only about doing less to harm the earth or consuming less resources, it is also about doing more good and minimizing the cumulative impact of other companies. Our core business is to provide industry, government and the public a wide range of sustainable solutions that protect and restore North America's natural environment. Our sustainability program expands our commitment beyond our services and products to include our operations, employees and community. The program focuses on the following key strategies:

Health and Safety

As noted above, Health and Safety is our #1 core value and as such is at the forefront of our sustainability program. Safety is not just the hallmark of our Company but is also at the heart of what we provide to customers. Our programs and procedures focus on delivering services with unparalleled safety to our employees, our customers, local communities and other key stakeholders. Eight of our U.S. sites have been recognized by the U.S. Occupational Safety & Health Administration’s Voluntary Protection Program ("VPP") for their effective safety management systems and low injury and illness rates. To put that in context, only approximately 2,100 workplaces in the U.S. have earned VPP recognition.

Human Rights

We are committed to fundamental human rights principles. Respect for human rights is essential to our interactions with employees, customers, shareholders and the public at large. In 2020, we published a comprehensive Human Rights Policy to formalize the standards to which we hold ourselves and others accountable.

Operations/ Customer Solutions

Technologies and operational improvements have allowed Clean Harbors to develop initiatives that focus on minimizing the Company’s and our customers’ impact on the environment. As a leading provider of environmental and industrial services throughout North America, we help our customers prevent the release of chemicals and hazardous waste streams into the environment. We also are the leading service provider in the recovery and decontamination of pollutants that have been released. This includes the safe destruction or disposal of hazardous materials in a manner that ensures these materials are no longer a danger to the environment. As an example, to provide an efficient and safe alternative for hazardous waste disposal, Clean Harbors developed and built an incinerator at our El Dorado facility which uses world-class air emissions control technology that meets the most stringent emissions standards under the U.S. Clean Air Act.

When providing these services, we are committed to the recycling, reuse and reclamation of these waste streams whenever possible using a variety of methods more fully explained below in the sections describing our general operations. Many of our branded services exemplify our commitment to sustainability and providing environmental solutions to the marketplace. Where possible, liquids such as solvents, chemicals and used oil are continuously recycled to industry standards and made into useful products. Tolling programs provide a closed-loop process in which the customer’s spent solvents are recycled to precise specifications and returned directly to the customer.

Our Safety-Kleen OilPlus® Program, unique to the oil industry, is designed to help companies manage their oil needs in a more sustainable way. By collecting used motor oil from customers and delivering new re-refined oil products, customers are implementing a closed-loop process for sustainability in the oil industry. We deploy our fleet of trucks, tankers, rail-cars and barges to collect used oil. In 2020, we gathered nearly 200 million gallons of used oil in North America and our state-of-the-art processes enable us to fully realize oils' remarkable capacity to be recycled, re-refined and reused. Our plants have re-refined more than 3.9 billion gallons of used oil since their opening, allowing such oils to have a second life as high quality recycled lubricants and avoiding more than an estimated 30.3 million metric tons of greenhouse gases.

Clean Harbors instills sustainability within its operations through continuous improvements and well-defined strategic initiatives that show the highest positive impact on the environment, the communities and the economy in which we work and live. Our assets represent one of our largest opportunities to apply environmentally sustainable business practices. Our Asset Refurbishment Program is a comprehensive effort to rebuild key vehicles to "like new" quality while reusing or recycling as much of the material as possible. Our goal is to refurbish approximately 100 highly technical vehicles used in our operations, like vacuum trucks, industrial air movers and waste oil trucks, every year. Similarly, we refurbish and place back into service thousands of parts washers and parts washer components each year, allowing us to extend the life of our parts washers and avoid disposing of over 500 tons of metals and plastics annually.

Environmental Commitment

One of the Company’s sustainability goals is to contribute to a cleaner environment by maximizing energy and water conservation across the organization. Energy usage at our facilities is the focus of our Facility Energy Conservation program, which provides ongoing oversight and recommendations to our facilities to help support their electricity management efforts. We continue to evaluate solar energy as a viable option for our facilities and have built solar arrays at select sites for their ongoing energy needs.

Clean Harbors makes fleet energy management a key focus, beginning with ongoing routing reviews by our logistics team to reduce total miles driven. We also evaluate options for reducing fuel costs including routine use of rail and barge transportation, implementation of alternative fuel vehicles and using our Performance Plus® and EcoPower® re-refined engine oils throughout our fleet. Clean Harbors is constantly upgrading our truck fleet with the most fuel-efficient systems and parts and has also designed custom, multi-compartment trucks that can be used to collect and deliver oil at the same time, decreasing fuel consumption.

As part of our commitment to protecting the environment, we have made the conscious decision to reduce our water usage. In 2021, we plan to implement a process to obtain a baseline of water usage so that we may make quantifiable reductions in the future.

Supply Chain

We believe in holding ourselves to high standards for sustainability and human rights practices and have taken efforts to drive sustainable practices through rigorous supply chain oversight. We monitor for practices that are not in line with our corporate vision and work to drive change. Our Vendor Code of Conduct establishes the minimum standards that must be met by all vendors regarding treatment of workers, safety, environmental impact and ethical business practices.

Community Engagement

Clean Harbors believes that by staying engaged with our customers, communities and other stakeholders, we can contribute to the long-term health of the environment, society and the economy. We are dedicated to being a good neighbor in the communities in which we work. When warranted, we utilize formal reporting platforms to inform customers and other stakeholders of our sustainability efforts, including CDP, EcoVadis and SP Global, among others.

We develop partnerships with key environmental programs to build awareness, while fostering more sustainable business practices. One of our most highly visible public programs for various government and community entities is known as our Home Hazardous Waste service line. Communities trust us to collect paints, solvents, batteries, fluorescent lamps, pesticides, cleaners and other hazardous materials that otherwise might be improperly disposed of or become dangerous to the communities where they are stored.

Our commitment and our business go hand in hand as we work to provide services and products that complement our customers' sustainability plans and hold ourselves and others accountable to environmental, social and corporate governance standards and best practices.

Competitive Strengths

- **Leading Provider of Environmental and Industrial Services** - We are a leading provider of environmental and industrial services. We own nine commercial hazardous waste incinerators, making us the largest operator of such facilities in North America. We are also one of the few industrial services companies with national footprints in both the U.S. and Canada. We provide multi-faceted, high-quality services to a broad mix of customers. Our vast capabilities, valuable and unique assets and breadth of services as well as our overall size, scale and geographic locations help us attract customers and provide environmentally responsible solutions.

- **Integrated Network of Assets** - We believe we operate, in the aggregate, the largest number of commercial hazardous waste incinerators, landfills, treatment facilities and TSDFs in North America. Our broad service network enables us to effectively handle a waste stream from its origin through disposal and to efficiently internalize our waste streams to reduce costs. Our size allows us to leverage our network and increase our profit margins as we can internalize a greater volume of waste in our incinerators, landfills and other disposal facilities. Furthermore, these assets are very difficult to duplicate because, in addition to sizable required capital investments, significant permitting and regulatory approvals would need to be obtained in order for new commercial waste disposal sites to come on-line. As such, these high barriers of entry provide increased value to our network.

- **Comprehensive Service Capabilities** - Our comprehensive service offerings allow us to act as a full-service provider to our customers. Our breadth of service offerings creates incremental revenue growth as customers seek to minimize the number of outside vendors utilized and demand "one-stop-shop" service providers.

- **Largest Collector and Recycler of Used Motor Oil** - As the largest re-refiner and recycler of used oil in North America, during 2019 and 2020, we returned approximately 191 million and 166 million gallons, respectively, of new re-refined oil, lubricants and byproducts back into the marketplace. In 2019 and 2020, our re-refining process eliminated more than an estimated 2.0 million and 1.7 million metric tons, respectively, of greenhouse gas ("GHG"). For 2020 alone, the estimated GHG's eliminated as a result of our re-refining process has the net carbon benefit equivalent to growing approximately 30 million trees for 10 years in an urban environment or taking over 387,000 passenger cars off the road for one year.

- **Effective Cost Management** - Our significant scale allows us to maintain low costs through standardized compliance procedures, significant purchasing power, leveraging our investment in technology and our ability to efficiently utilize logistics and transportation to economically direct waste streams to the most efficient facility. We also have the ability to use internal resources to transport and process the substantial majority of all hazardous waste that we manage for our customers. As evidenced in our 2020 results, we reduced subcontractor, outside transportation and third-party disposal costs by leveraging our employee and asset bases. In addition, our Safety-Kleen results are significantly impacted by the overall market pricing and product mix associated with base and blended oil products. We charge fees related to our used oil collection services which allow us to effectively manage the profit spreads inherent in our Safety-Kleen business.

- **Large and Diversified Customer Base** - Our customers range from small companies to Fortune 500 companies and include public and private entities that span multiple industries and business types, including government entities. This diversification limits our credit exposure to any one customer and potential cyclicality in any one industry. As a percentage of our 2020 revenues, the top ten industries we serviced totaled approximately 76% of 2020 revenues and included general manufacturing (17%), chemical (15%), automotive (9%), refineries (8%), base and blended oils (6%), government (5%), transportation (5%), utilities (4%), brokers (4%) and construction (3%).

- **Stable and Recurring Revenue Base** - We have long-standing relationships with our large customers, many of whom have worked with our Company for decades. Our diversified customer base provides stable and recurring revenues, as a significant portion of our revenues are derived from previously served customers with recurring needs for our services. In addition, there can be a financial burden that accompanies switching hazardous waste disposal providers due to customers' desire to audit disposal facilities prior to their qualification as approved sites and to limit the number of facilities to which their hazardous waste is shipped in order to reduce potential liability under United States and Canadian environmental laws and regulations. We have been selected as an approved vendor by large and small generators of waste because we possess comprehensive collection, recycling, treatment, transportation, disposal and hazardous waste tracking capabilities and have the expertise necessary to comply with applicable environmental laws and regulations. Those customers that have selected us as an approved vendor typically continue to use our services on a recurring basis.

- **Regulatory Compliance** - We continue to make capital investments in our facilities to ensure that they are in compliance with current federal, state, provincial and local regulations. Companies that rely on in-house disposal may find the current regulatory requirements to be too capital intensive or complicated, and may choose to outsource many of their hazardous waste disposal needs.

- **Proven and Experienced Management Team** - Our executive management team provides depth and continuity. Our executive officers collectively have over 200 years of experience and expertise in the environmental and industrial services industries. Our Chief Executive Officer founded our Company in 1980 and, since the Company's formation, has served as both the Chief Executive Officer and Chairman of the Board.

Operations

Environmental Services

Our Environmental Services business offers an array of services to customers. We collect, transport, treat and dispose of hazardous and non-hazardous waste, including resource recovery, physical treatment, fuel blending, incineration, landfill disposal, wastewater treatment, lab chemical disposal, explosives management and CleanPack® services. Our CleanPack® services include the collection, identification, categorization, specialized packaging, transportation and disposal of laboratory chemicals and household hazardous waste. We also perform a wide range of industrial maintenance and specialty industrial services and utilize specialty equipment and resources to perform field services at any chosen location on a planned or emergency response basis. All of these services are designed to protect the environment and address environmental related challenges through the use of innovation and the latest technologies. We provide customers with sustainable solutions that seek to recycle waste materials whenever possible.

Technical Services. We provide technical services through a network of service centers from which a fleet of vehicles are dispatched to pick up customers' waste either on a predetermined schedule or on demand, and to deliver the waste to permitted facilities, which are usually Company-owned. Our service centers can also dispatch chemists to a customer location for collection of chemical and laboratory waste for disposal. InSite Service® offerings is a branded on-site/in-plant service delivery program through which we offer a full range of environmental, industrial and waste management services. This signature program is built on safety, quality, efficiency and integrity, and has been offered by Clean Harbors for more than 25 years. By leveraging Clean Harbors' expertise and capabilities, our on-site staff are dedicated to developing the safest, most cost-effective and sustainable solutions to service customers' needs.

Collection, Transportation and Logistics Management. As an integral part of our services, we collect industrial waste from customers and transport such waste to and between our facilities for treatment or bulking for shipment to final disposal locations. Customers typically accumulate waste in containers, such as 55-gallon drums, bulk storage tanks or 20-cubic-yard roll-off containers. In providing this service, we utilize a variety of specially designed and constructed tank trucks and semi-trailers as well as third-party transporters, including railroads.

Treatment and Disposal. We recycle, treat and dispose of hazardous and non-hazardous industrial waste. The waste handled includes substances which are classified as "hazardous" because of their corrosive, ignitable, infectious, reactive or toxic properties, and other substances subject to federal, state and provincial environmental regulation. We provide final treatment and disposal services designed to manage waste which cannot be otherwise economically recycled or reused. The waste that we handle comes in solid, sludge, liquid and gas form.

We operate a network of TSDFs that collect, temporarily store and/or consolidate compatible waste streams for more efficient transportation to final recycling, treatment or disposal destinations. These facilities hold special permits, such as Part B permits under the Resource Conservation and Recovery Act ("RCRA") in the United States, which allow them to process, transfer and dispose of waste through various technologies including recycling, incineration, landfill and wastewater treatment depending on each location's permitted and constructed capabilities.

Resource Recovery and Fuel Blending. We operate recycling systems for the reclamation and reuse of certain waste, particularly solvent-based waste generated by industrial cleaning operations, metal finishing and other manufacturing processes. Resource recovery involves the treatment of waste using various methods, which effectively remove contaminants from the original material to restore its fitness for its intended purpose and to reduce the volume of waste requiring disposal.

We also operate a recycling facility that recycles refinery waste and spent catalyst. The recycled oil and catalysts, depending on market conditions, are sold to third parties.

Incineration. Incineration is the preferred method for the treatment of organic hazardous waste because it effectively destroys the contaminants at high temperatures. High temperature incineration efficiently eliminates organic waste such as herbicides, halogenated solvents, pesticides and pharmaceutical and refinery waste, regardless of form as gas, liquid, sludge or solid. Federal and state incineration regulations require a destruction and removal efficiency of 99.99% for most organic waste.

As of December 31, 2020, we had nine active incinerators operating in five incinerator facilities that offer a wide range of technological capabilities to customers. In the United States, we operate a fluidized bed thermal oxidation unit for maximum destruction efficiency of hazardous waste with an estimated annual practical capacity of 58,808 tons and three solids and liquids capable incinerator facilities with a combined estimated annual practical capacity of 377,387 tons. We also operate one hazardous waste liquid injection incinerator in Canada with total annual practical capacity of 125,526 tons.

Our incinerator facilities in Kimball, Nebraska; Deer Park, Texas; El Dorado, Arkansas; and Aragonite, Utah, are designed to process liquid organic waste, sludge, solids, soil and debris. Our Deer Park facility has two kilns and a rotary reactor. Our El Dorado facility specializes in the treatment of bulk and containerized hazardous liquids, solids and sludge, and has a hazardous waste incinerator which specializes in high-temperature incineration of regulated waste such as industrial and laboratory chemicals, manufacturing byproducts, fertilizers and other solid and liquid materials that would otherwise be hazardous to the environment and public health if not properly managed. Our facilities in Kimball and Deer Park also have on-site landfills for the disposal of ash produced as a result of the incineration process.

Our incinerator facility in Lambton, Ontario, is a liquid injection incinerator designed primarily for the destruction of liquid organic waste. Typical waste streams include wastewater with low levels of organics and other higher concentration organic liquid waste not amenable to conventional physical or chemical waste treatment.

Landfills. Landfills are primarily used for disposal of inorganic waste. In the United States and Canada, we operate seven commercial landfills, six of which are designed and permitted for disposal of hazardous waste and one which is operated for non-hazardous industrial waste disposal. Of our six hazardous waste commercial landfills, four are located in the United States and two are located in Canada. Our non-hazardous landfill is located in the United States. In addition to our seven commercial landfills, we also own and operate, as described above, two non-commercial landfills that only accept waste from our on-site incinerators.

As of December 31, 2020, the useful economic lives of our six commercial hazardous waste landfills included approximately 21.1 million cubic yards of remaining capacity. We estimate the useful economic lives of landfills to include permitted airspace and unpermitted airspace that our management believes to be probable of being permitted based on our analysis of various factors. In addition to the capacity included in the useful economic life of these landfills, there are approximately 31.9 million cubic yards of additional unpermitted airspace capacity included in the footprints of these landfills that may ultimately be permitted, although there can be no assurance that this additional capacity will be permitted. As of December 31, 2020, the useful economic life of our non-hazardous industrial landfill included 3.4 million cubic yards of remaining permitted capacity. This facility is located in the United States and has been issued operating permits under Subtitle D of RCRA. Our non-hazardous landfill facility is permitted to accept commercial industrial waste, including waste from demolition and construction.

Wastewater Treatment. We operate nine wastewater treatment facilities that offer or employ a range of wastewater treatment technologies. These wastewater treatment operations involve processing hazardous and non-hazardous waste through use of physical and chemical treatment methods. These facilities treat a broad range of industrial liquid and semi-liquid waste containing heavy metals, organics and suspended solids.

Total Project Management. We also provide total project management services in areas such as chemical packing, on-site waste management, remediation, compliance training and emergency spill response, while leveraging Clean Harbors' network of service centers and environmental capabilities.

Field and Emergency Response Services. Our crews and equipment are dispatched on a planned or emergency basis and perform services such as confined space entry for tank cleaning, site disinfecting, decontamination and disposal, including such work for COVID-19 decontamination, large remediation projects, demolition, spill cleanup on land and water, railcar cleaning, product recovery and transfer, scarifying and media blasting, vacuum services and water treatment services.

We are also a leader in providing response services for environmental emergencies of any scale from man-made disasters such as oil spills and natural disasters such as hurricanes.

Industrial Services and Other. We perform industrial maintenance services and specialty industrial services at refineries, mines, upgraders, chemical plants, pulp and paper mills, manufacturing and power generation facilities. We provide these services throughout North America.

Our crews handle as-needed in-plant services to support ongoing in-plant cleaning and maintenance services, including liquid/dry vacuum, hydro-blasting, dewatering and materials processing, water and chemical hauling and steam cleaning. We provide a variety of specialized industrial services including plant outage and turnaround services, decoking and pigging, chemical cleaning, high and ultra-high pressure water cleaning, pipeline inspection and coating services and large tank and surface impoundment cleaning. We provide daylighting services which, through the use of specialized hydro vac equipment, deliver safer, cleaner and more precise hydro excavation services to safely uncover highly sensitive underground targets. Our crews also handle oilfield transport and production services supporting drilling, production and completion programs and upstream energy services, such as exploration and drilling for industrial oil and gas customers.

Safety-Kleen

Our Safety-Kleen business offers an array of environmental services and complementary products to a diverse range of customers including automobile repair shops, car and truck dealers, metal fabricators, machine manufacturers, fleet maintenance shops and other automotive, industrial and retail customers.

As the largest provider of parts cleaning services in North America, Safety-Kleen offers a complete line of specially designed parts washers to customer locations and then delivers recurring service that includes machine cleaning and maintenance and disposal and replacement of clean solvent or aqueous fluids. We also sell automotive and industrial cleaning products which include antifreeze, windshield washer fluid, degreasers, glass and floor cleaners, hand cleaners, absorbents, mats and spill kits.

Utilizing our collection network, we provide pickup and transportation of hazardous and non-hazardous containerized waste for recycling or disposal, primarily through the Clean Harbors network of recycling, treatment and disposal facilities. We also collect used oil which serves as feedstock for our oil re-refineries discussed below, or process the oil into recycled fuel oil, or “RFO,” which is then sold to customers such as asphalt plants, industrial plants, pulp and paper companies. The used oil is also processed into vacuum gas oil which can be further re-refined into lubricant base oils or sold directly into the marine diesel oil fuel market.

Our vacuum services remove solids, residual oily water and sludge and other fluids from customers' oil/water separators, sumps and collection tanks. We also remove and collect waste fluids found at large and small industrial locations, including metal fabricators, auto maintenance providers and general manufacturers.

Utilizing used oil collected by Safety-Kleen branches, we manufacture, formulate, package, distribute and market high-quality lubricants. We offer these products direct to business end-users and customers that can in turn market to retailers and end-users. The used oil collected by Safety-Kleen's branch network is processed or re-refined to convert into a variety of products, mostly base and blended lubricating oils, and much smaller quantities of asphalt-like material, glycols and fuels. As the largest re-refiner of used oil in North America, we can process the used oil collected through our seven re-refineries located in East Chicago, Indiana; Newark, California; Wichita, Kansas; Tacoma, Washington; Fallon, Nevada; Rollinsford, New Hampshire; and Breslau, Ontario. In 2020, in order to respond to the reduced availability of used motor oils and reduced demand for base and blended oil products stemming from the COVID-19 pandemic, we temporarily shuttered nearly half of the total production capacity of these re-refineries. By the end of 2020, our re-refinery production capacity had returned to mid-2019 levels.

One of the primary goals of our Safety-Kleen business is to produce and sell high-quality eco-friendly blended oils, which are created by combining our re-refined base and other base oils with performance additives in accordance with our proprietary formulations and American Petroleum Institute licenses. Our Performance Plus® and EcoPower® family of products are sold to on- and off-road corporate fleets, government entities, automotive service shops and industrial plants, which are serviced through our internal distribution network, as well as an extensive United States and Canada-wide independent distributor network. We also sell unbranded blended oils to distributors that resell them under their private label brands. Our OilPlus® program consists of selling our renewable oil products directly to our end customers. We sell the base oil that we do not blend and sell ourselves to independent blenders/packagers that use it to blend their own branded or private label oils. With nearly 200 million gallons of used oil processed annually, we were able to return approximately 166 million gallons of new re-refined oil, lubricants and byproducts back into the marketplace in 2020. We believe our position as the largest collector and re-refiner of used oil in North America, along with our vast service and distributions network, provide a distinct competitive advantage in our ability to provide our customers with collection and oil distribution services through our OilPlus® closed loop program.

Seasonality

Our operations may be affected by seasonal fluctuations primarily due to weather and budgetary cycles influencing the timing of customers' spending for products and services. Typically during the first and fourth quarters of each year there is less demand for our products, oil collection, recycling services and environmental services due to lower customer activity levels resulting from the cold weather, particularly in Canada and the northern and midwestern regions of the United States. As a result, reduced volumes of waste are received at our facilities, higher operating costs are realized due to sub-freezing weather and high levels of snowfall and lower volumes of used oil are generated for our collection. Customer factory closings for year-end holidays also contribute to reduced waste volumes in our network of facilities during this time.

Geographical Information

For the year ended December 31, 2020, we generated $2,706.9 million or 86.1% of our direct revenues in the United States and $437.2 million or 13.9% of our direct revenues in Canada. For the year ended December 31, 2019, we generated $2,863.5 million or 83.9% of our direct revenues in the United States and $548.6 million or 16.1% of our direct revenues in Canada. For additional information about the geographical areas from which our direct revenues are derived and in which our assets are located, see Note 3, "Revenues," and Note 19, "Segment Reporting," respectively, to our consolidated financial statements included in Item 8 of this report.

Competitive Markets

Due to the variety of services and products offered, the Company faces competition from companies in various industries, though no one competitor directly competes with our full suite of offerings. Sources of competition vary by locality and by type of service rendered, with competition coming from national and regional industrial and automotive waste services companies and hundreds of privately-owned firms. Veolia North America, US Ecology, Inc., Harsco Corporation, Stericycle, Inc. and Heritage-Crystal Clean are the principal national firms with which we compete. Each of these competitors is able to provide one or more of the environmental services we offer.

Under federal and state environmental laws in the United States, generators of hazardous waste remain liable for improper disposal of such waste. Although generators may hire various companies that have the proper permits and licenses, because of the generators' potential liability, they are very interested in the reputation and financial strength of the companies they use for the management of their hazardous waste. We believe that our technical proficiency, safety record, customer service oriented culture and overall reputation are important considerations to our customers in selecting and continuing to utilize our services. We also believe that the depth of our recycling, treatment and disposal capabilities, our ability to collect and transport waste products efficiently and our pricing are additional significant factors in the market for treatment and disposal services.

Competition within our Environmental Services segment varies by locality and type of service rendered.

- For our landfill and waste services, competitors include several major national and regional environmental services firms, as well as numerous smaller local firms. We believe the availability of skilled, technical and professional personnel, quality of performance, diversity of services, safety record, quality of assets and use of current technologies, as well as price, are the key competitive factors in this service industry.
- For our industrial, field and emergency response services, competitors vary by locality and by type of service rendered, with competition coming from national and regional service providers and hundreds of privately-owned firms that offer industrial services. Envirosystems and HydroChemPSC in the United States, and CEDA International Corporation and Tervita in Canada, are the principal national firms with which we compete for this work. Each of these competitors is able to provide one or more of the industrial and field services we offer. We believe the availability of specialized equipment and latest technologies, skilled, technical, and professional personnel, quality of performance, diversity of services, safety record and price are the key competitive factors in this industry.

For our Safety-Kleen segment, competitors vary by locality and by type of services rendered, with competition coming from Heritage-Crystal Clean, along with several regional and local firms. We believe that geographic coverage, pricing and breadth of services and products are key competitive factors in this industry. With our Safety-Kleen Oil Plus® closed loop offering, we are competing in certain markets with other North American lubricant distributors.

The principal methods of competition for all of our services and products are quality, price, reliability of service rendered or products sold and technical proficiency. We believe that we offer a more comprehensive range of environmental and industrial services than our competitors in major portions of the United States and Canada.

Human Capital

As of December 31, 2020, we employed approximately 13,500 active full-time employees, of which 920 in the United States and 540 in Canada were represented by labor unions. In response to the needs of our business, we also employ temporary and part time employees. As of December 31, 2020, the total of all active employees was nearly 14,000.

Our human capital objectives focus on the health and safety of our employees, employee development and training and compensation and benefits. Key metrics that management uses to measure these objectives include TRIR and voluntary turnover rates, both of which are monitored at all levels of the organization. We believe that our relationship with our employees is positive and we engage with our employees through an annual employee engagement survey, and other mechanisms, to continue the development of these relationships. As part of our commitment to employee safety and quality customer service, we have an extensive compliance program and trained environmental, health and safety staff. We continually strive to invest in our employees through training programs as well as competitive compensation and benefit programs, including matching employee contributions towards retirement savings plans and covering annual healthcare cost increases.

Resources

We have invested significantly in the development of proprietary technologies and also to establish and maintain an extensive knowledge of leading technologies. We incorporate these technologies into the services we offer and provide to our customers. For example, our internally developed proprietary software system, Waste Information Network, electronically tracks each step taken by any particular load of waste in our business.

As of December 31, 2020, we held a total of 26 U.S. and 8 foreign issued or granted patents (which will expire between 2021 and 2031), two foreign pending patent applications and 91 U.S. and 59 foreign trademark registrations. We also license software and other intellectual property from various third parties. We enter into confidentiality agreements with certain of our employees, consultants and corporate partners, and control access to software documentation and other proprietary information. We believe that we hold adequate rights to all intellectual property used in our business and that we do not infringe upon any intellectual property rights held by other parties.

We must obtain and maintain permits and licenses for transportation and industrial needs in both Environmental Services and Safety-Kleen. We are required to obtain federal, state, provincial and local permits or approvals for each of our hazardous waste facilities. These permits and licenses are material to our business operations. Such permits are difficult to obtain and, in many instances, extensive studies, tests and public hearings are required before the approvals can be issued. Our compliance programs are paramount in maintaining these permits and licenses as well.

Management of Risks

We adhere to a program of risk management policies and practices designed to reduce potential liability, as well as to manage customers' ongoing environmental exposures. This program includes installation of risk management systems at our facilities, such as fire suppression, employee training, environmental consciousness, auditing and policy decisions restricting the types of waste handled. We evaluate all revenue opportunities and decline those that we believe involve unacceptable risks.

We dispose of waste at our incinerator, wastewater treatment and landfill facilities, or at facilities owned and operated by other firms that we have audited and approved. We apply established technologies to treatment, storage and recovery of hazardous waste. We believe our operations are conducted in a safe and prudent manner and in substantial compliance with applicable laws and regulations.

Insurance and Financial Assurance

Our insurance programs cover the potential risks associated with our multifaceted operations from two primary exposures: direct physical damage and third-party liability. We maintain a casualty insurance program providing coverage for vehicles, employer's liability and commercial general liability in the aggregate amount of $105.0 million, $102.0 million and $102.0 million, respectively, per year, subject to retentions of $1.0 million for employers' liability in the United States and $2.0 million (CAD) in Canada and $2.0 million per occurrence for auto and commercial general liability. Our auto and commercial general liability umbrella policy includes a $5.0 million annual aggregate self-insured corridor retention as well. We also have workers' compensation insurance with limits established by state statutes.

We have pollution liability insurance policies covering potential risks in three areas: as a contractor performing services at customer sites, as a transporter of waste and as a processor of waste at our facilities. The contractor's pollution liability insurance has limits of $20.0 million per occurrence and $25.0 million in the aggregate, covering offsite remedial activities and associated liabilities.

For sudden and accidental in-transit pollution liability, our auto liability policy provides the primary $5.0 million per occurrence of transportation pollution insurance. Our pollution liability policies provide an additional $75.0 million per occurrence and $80.0 million in the aggregate for a total of $80.0 million per occurrence and $85.0 million in the aggregate, respectively. A $2.0 million deductible per occurrence applies to this coverage in the United States and Canada.

Federal and state regulations require liability insurance coverage for all facilities that treat, store or dispose of hazardous waste. RCRA, the Toxic Substances Control Act and comparable state hazardous waste regulations typically require hazardous waste handling facilities to maintain pollution liability insurance in the amount of $1.0 million per occurrence and $2.0 million in the aggregate for sudden occurrences and $3.0 million per occurrence and $6.0 million in the aggregate for non-sudden occurrences. Our liability insurance coverage meets or exceeds all federal and state regulations.

We maintain property insurance on our physical locations valued in excess of $10.0 million covering direct physical damage. We consolidated the insurance on these locations and this policy has a $10.0 million aggregate deductible. We are self-insured for locations not specifically listed on this policy.

Our international operations are insured under locally placed insurance policies that are compulsory in a specific country. In addition, we have a global foreign liability policy that will provide excess and difference in condition coverage in international countries.

Under our insurance programs, coverage is obtained for catastrophic exposures, cyber security as well as those risks required to be insured by law or contract. It is our policy to retain a significant portion of certain expected losses related primarily to employee benefits, workers' compensation, commercial general and vehicle liability. Provisions for losses expected under these programs are recorded based upon our estimates of the actuarially determined value of the aggregate liability for claims. We believe that policy cancellation terms are similar to those of companies in other industries.

Operators of hazardous waste handling and certain other permitted facilities are required by federal, state, provincial and local regulations to provide financial assurance for closure and post-closure care of those facilities should the facilities cease operation. Closure would include the cost of removing the waste stored at a facility which ceased operating and sending the material to another facility for disposal and the cost of performing certain procedures for decontamination of the facility. As of December 31, 2020, our total estimated closure and post-closure costs requiring financial assurance by regulators were $491.6 million for our U.S. facilities and $58.2 million for our Canadian facilities. We have obtained all of the required financial assurance for our facilities through a combination of surety bonds and insurance from qualified insurance companies.

Government Regulations

While our business has benefited substantially from increased government regulation of hazardous waste transportation, storage and disposal, the environmental services industry itself is the subject of extensive and evolving regulation by federal, state, provincial and local authorities. As noted above, we are required to obtain federal, state, provincial and local permits or approvals for each of our hazardous waste facilities. We have acquired all material operating permits and approvals now required for the current operation of our business and have applied for, or are in the process of applying for, all permits and approvals needed in connection with planned expansion or modifications of our operations.

We make a continuing effort to anticipate regulatory, political and legal developments that might affect operations, but are not always able to do so. We cannot predict the extent to which any legislation or regulation that may be enacted or enforced in the future may affect our operations.

United States Hazardous Waste Regulation

Federal Regulations. The most significant federal environmental laws affecting us are the RCRA, the Comprehensive Environmental Response, Compensation and Liability Act, also known as the "Superfund Act," the Clean Air Act, the Clean Water Act and the Toxic Substances Control Act ("TSCA").

RCRA. RCRA is the principal federal statute governing hazardous waste generation, treatment, transportation, storage and disposal. Pursuant to RCRA, the Environmental Protection Agency ("EPA") has established a comprehensive "cradle-to-grave" system for the management of a wide range of materials identified as hazardous waste. States that have adopted hazardous waste management programs with standards at least as stringent as those promulgated by the EPA have been delegated authority by the EPA to administer their facility permitting programs in lieu of the EPA's program.

Every facility that treats, stores or disposes of hazardous waste must obtain a RCRA permit from the EPA or an authorized state agency unless a specific exemption exists, and must comply with certain operating requirements ("Part B" permitting process). RCRA also requires that Part B permits contain provisions for required on-site study and cleanup activities, known as "corrective action," including detailed compliance schedules and provisions for assurance of financial responsibility. See Note 9, "Closure and Post-Closure Liabilities," and Note 10, "Remedial Liabilities," to our consolidated financial statements included in Item 8 of this report for a discussion of our environmental liabilities. See "Insurance and Financial Assurance" above for a discussion of our financial assurance requirements.

The Superfund Act. The Superfund Act is the primary federal statute regulating the cleanup of inactive hazardous substance sites and imposing liability for cleanup on the responsible parties. It provides for immediate EPA coordinated response and removal actions for hazardous substances released into the environment. It also authorizes the government to respond to the release or threatened release of hazardous substances or to order responsible persons to perform any necessary cleanup. The statute provides for strict and, in certain cases, joint and several liability to the parties involved in the generation, transportation and disposal of hazardous substances for the cost of these responses and for the cost of damages to natural resources. Under the statute, we may be deemed liable as a generator or transporter of a hazardous substance which is released into the environment, or as the owner or operator of a facility from which there is a release of a hazardous substance into the environment. See Note 17, "Commitments and Contingencies," to our consolidated financial statements included in Item 8 of this report for a description of the principal such proceedings in which we are now involved.

The Clean Air Act. The Clean Air Act was passed by Congress to control the emissions of pollutants into the air and requires permits to be obtained for certain sources of hazardous air pollutants, such as vinyl chloride or air criteria pollutants, such as carbon monoxide. In 1990, Congress amended the Clean Air Act to require further reductions of air pollutants with specific targets for non-attainment areas in order to meet certain ambient air quality standards. These amendments also require the EPA to promulgate regulations which (i) control emissions of 187 hazardous air pollutants; (ii) create uniform operating permits for major industrial facilities similar to RCRA operating permits; (iii) mandate the phase-out of ozone depleting chemicals; and (iv) provide for enhanced enforcement.

The Clean Water Act. This legislation prohibits discharge of pollutants into the waters of the United States without government authorization and regulates the discharge of pollutants into surface waters and sewers from a variety of sources, including disposal sites and treatment facilities. The EPA has promulgated "pretreatment" regulations under the Clean Water Act, which establish pretreatment standards for introduction of pollutants into publicly owned treatment works. In the course of the treatment process, our wastewater treatment facilities generate wastewater, which we discharge to publicly owned treatment works pursuant to permits issued by the appropriate government authorities. We are required to obtain discharge permits and conduct sampling and monitoring programs.

TSCA. We operate a network of collection, treatment and field services (remediation) facilities throughout North America whose activities are regulated under provisions of TSCA. TSCA established a national program for the management of substances classified as polychlorinated biphenyls ("PCBs") which include waste PCBs as well as RCRA waste contaminated with PCBs. The rules set minimum design and operating requirements for storage, treatment and disposal of PCB waste. Since their initial publication, the rules have been modified to enhance the management standards for TSCA-regulated operations including the decommissioning of PCB transformers and articles, detoxification of transformer oils, incineration of PCB liquids and solids, landfill disposal of PCB solids, and remediation of PCB contamination at customer sites.

Other Regulation Impacting the US Operations

Federal Regulations. In addition to regulations specifically directed at our transportation, storage and disposal facilities, there are a number of regulations that may "pass-through" to the facilities based on the acceptance of regulated waste from affected customer facilities. Each facility that accepts affected waste must comply with the regulations for that waste, facility or industry. Examples of this type of regulation are National Emission Standards for Benzene Waste Operations and National Emissions Standards for Pharmaceuticals Production. Each of our facilities addresses these regulations on a case-by-case basis determined by its requirement to comply with the pass-through regulations.

In our transportation operations, we are regulated by the U.S. Department of Transportation, the Federal Railroad Administration, the Federal Aviation Administration and the U.S. Coast Guard, as well as by the regulatory agencies of each state in which we operate or through which our vehicles pass.

Health and safety standards under the Occupational Safety and Health Act ("OSHA") are also applicable to all of our operations.

State and Local Regulations. Pursuant to the EPA's authorization of RCRA equivalent state run programs, a number of U.S. states have regulatory programs governing the operations and permitting of hazardous waste facilities. Accordingly, the hazardous waste treatment, storage and disposal activities of a number of our facilities are regulated by the relevant state agencies in addition to federal EPA regulation.

Some states classify as hazardous certain wastes that are not regulated under RCRA. For example, Massachusetts and California consider used oil as "hazardous waste" while RCRA does not. Accordingly, we must comply with state requirements for handling state regulated waste, and, when necessary, obtain state licenses for treating, storing and disposing of such waste at our facilities.

Some states regulate other aspects of our operations, as well. For example, California and New York have set strict regulations regarding the level of volatile organic compounds in parts washer solvents. We are and will remain in compliance with state regulations.

Our facilities are also regulated pursuant to state statutes, including those addressing clean water and clean air. Local sewer discharge and flammable storage requirements are applicable to certain of our facilities. Our facilities are also subject to local siting, zoning and land use restrictions. We believe that each of our facilities is in substantial compliance with the applicable requirements of federal and state licenses which we have obtained. Once issued, such licenses have maximum fixed terms of a given number of years, which differ from state to state, ranging from three to ten years. The issuing state agency may review or modify a license at any time during its term. We anticipate that once a license is issued with respect to a facility, the license will be renewed at the end of its term if the facility's operations are in compliance with applicable requirements.

However, there can be no assurance that regulations governing future licensing will remain static, or that we will be able to comply with such requirements.

Regulations by the International Maritime Organization ("IMO") primarily impact shipping businesses, however we continue to monitor the impact of the new regulation for a 0.50% global sulphur cap for marine fuels which began on January 1, 2020 (known as IMO 2020). Under the new global cap, ships that traverse the oceans are required to use marine fuels with a sulphur content of no more than 0.50% sulphur, versus the previous cap of 3.50%, in an effort to reduce the amount of sulphur oxide and decrease pollution and greenhouse gas emissions from the global shipping fleet, which now uses an estimated 3.5 to 4 million barrels per day of fuel oil. The shipping industry is the last major transportation sector to utilize fuel with high levels of sulfur, which is the reason the IMO pushed the industry to more closely align with other transport sectors for pollution reduction.

Given the disruption to global economies and the marine shipping industry from the COVID-19 pandemic there are several variables around this regulatory change whereby the impacts of such changes still remain unclear. However, it is expected that if marine activity returns to pre-pandemic levels, the implementation of IMO 2020 will result in a significant increase in demand for a broad range of low sulfur distillates including diesel, marine gas oil, marine diesel oil and vacuum gas oil, among others. At this time we cannot predict the impact IMO 2020 could ultimately have on Safety-Kleen's re-refining and fuels distribution operations, however we will continue to monitor the impact on our business as demand increases and industries rebound.

Canadian Hazardous Waste Regulation

In Canada, the provinces retain control over environmental issues within their boundaries and thus have the primary responsibility for regulating management of hazardous waste. The federal government regulates issues of national scope or where activities cross provincial boundaries.

Provincial Regulations. Most of Canada's industrial development and the major part of its population are located in four provinces: Ontario, Quebec, Alberta and British Columbia, each of which have detailed environmental regulations. We operate major waste management facilities in each of these provinces, as well as waste transfer facilities in Nova Scotia and Manitoba.

The main provincial acts dealing with hazardous waste management are:

- Ontario—Environmental Protection Act;
- Quebec—Environmental Quality Act;
- Alberta—Environmental Protection and Enhancement Act; and
- British Columbia—Waste Management Act.

These pieces of legislation were developed by the provinces independently and, among other things, generally control the generation, characterization, transport, treatment and disposal of hazardous waste. Regulations developed by the provinces under the relevant legislation are also developed independently, but are often quite similar in effect and sometimes in application. For example, there is some uniformity in manifest document design and utilization.

Provincial legislation also provides for the establishment of waste management facilities. In this case, the facilities are also controlled by provincial statutes and regulations governing emissions to air, groundwater and surface water and prescribing design criteria and operational guidelines.

Waste transporters require a permit to operate under provincial waste management regulations and are subject to the requirements of the Federal Transportation of Dangerous Goods Act, as discussed below. They are required to report the quantities and disposition of materials shipped.

Canadian Federal Regulations. The Canadian federal government has authority for those matters which are national in scope and in impact and for Canada's relations with other nations. The main federal laws governing hazardous waste management are:

- Canadian Environmental Protection Act (1999) ("CEPA 99"), and
- Transportation of Dangerous Goods Act

Environment Canada is the federal agency with responsibility for environmental matters and the main legislative instrument is the CEPA 99. This act charges Environment Canada and Health Canada, the Federal agency responsible for the health of individuals, with protection of human health and the environment and seeks to control the production, importation and use of substances in Canada and to control their impact on the environment.

The Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations under CEPA 99 control the export and import of hazardous waste and hazardous recyclable materials. By reference, these regulations incorporate the Transportation of Dangerous Goods Act and Regulations, which address identification, packaging, marking and documentation of hazardous materials during transport. CEPA 99 requires that anyone proposing to export or import hazardous waste or hazardous recyclable materials or to transport them through Canada, must notify the Minister of the Environment and obtain a permit to do so. Section 9 of CEPA 99 allows the federal government to enter into administrative agreements with the provinces and territories for the development and improvement of environmental standards. These agreements represent cooperation towards a common goal rather than a delegation of authority under CEPA 99. To facilitate the development of provincial and territorial agreements, the federal, provincial and territorial governments participate in the Canadian Council of Ministers of the Environment ("CCME"). The CCME comprises the 14 environment ministers from the federal, provincial and territorial governments, who normally meet at least once a year to discuss national environmental priorities and to determine work to be carried out under the auspices of the CCME.

Canadian Local and Municipal Regulations. Local and municipal regulations seldom reference direct control of hazardous waste management activities. Municipal regulations and by-laws, however, control such issues as land use designation, access to municipal services and use of emergency services, all of which can have a significant impact on facility operation.

Compliance with Environmental Regulations

The environmental regulations discussed above require that we remediate contaminated sites, operate our facilities in accordance with enacted regulations, obtain required financial assurance for closure and post-closure care of our facilities should such facilities cease operations and make capital investments in order to keep our facilities in compliance with environmental regulations.

As further discussed in Note 9, "Closure and Post-Closure Liabilities," and Note 10, "Remedial Liabilities," to our consolidated financial statements included in Item 8 of this report, we have accrued environmental liabilities as of December 31, 2020, of $202.7 million. For the years ended December 31, 2020, 2019 and 2018, we spent $12.4 million, $18.7 million and $10.1 million, respectively, to address environmental liabilities.

As discussed more fully above under the heading "Insurance and Financial Assurance," we are required to provide financial assurance with respect to certain statutorily required closure, post-closure and corrective action obligations at our facilities. We have placed the required financial assurance primarily through qualified insurance companies.

As described in Note 17, "Commitments and Contingencies," to our consolidated financial statements included in Item 8 of this report, we are involved in legal proceedings arising under environmental laws and regulations. Alleged failure to comply with laws and regulations may lead to the imposition of fines or the denial, revocation or delay of the renewal of permits and licenses by government entities. In addition, such government entities, as well as surrounding landowners, may claim that we are liable for environmental damages. Citizens groups have become increasingly active in challenging the grant or renewal of permits and licenses for hazardous waste facilities, and responding to such challenges has further increased the costs associated with establishing new facilities or expanding current facilities. A significant judgment against us, the loss of a significant permit or license or the imposition of a significant fine could have a material effect on our business and future prospects.

ITEM 1A. RISK FACTORS

An investment in our securities involves certain risks, including those described below. You should consider carefully these risk factors together with all of the information included in or incorporated by reference in this report before investing in our securities.

Risks Affecting All of Our Businesses

Our businesses are subject to operational and safety risks.

Providing environmental and industrial services to our customers by both of our business segments involves risks such as equipment defects, malfunctions and failures and natural disasters, which could potentially result in releases of hazardous materials, damage to or total loss of our property or assets, injury or death of our employees or a need to shut down or reduce operation of our facilities while remedial actions are undertaken. Our employees and subcontractors, when necessary, often work under potentially hazardous conditions. These risks expose us to potential liability for pollution and other environmental damages, personal injury, loss of life, business interruption and property damage or destruction. We must also maintain a solid safety record in order to remain a preferred supplier to our major customers. While we seek to minimize our exposure to such risks primarily through (i) comprehensive training programs, (ii) utilizing proper equipment and the latest technologies, (iii) our Environmental Compliance Internal Audit Program, (iv) vehicle and equipment maintenance programs, (v) subcontracting with reputable third-parties and (vi) insurance, such actions and insurance may not be adequate to cover all of our potential liabilities which could negatively impact our results of operations and cash flows.

Our businesses are subject to numerous statutory and regulatory requirements, which may increase in the future.

Our businesses are subject to numerous statutory and regulatory requirements. Our ability to continue to hold licenses and permits required for our businesses is subject to maintaining satisfactory compliance with such requirements. We may incur significant costs to maintain compliance. Future statutory and regulatory requirements, including any legislation focused on climate change, may require significant cost to comply or may require changes to our products or services.

Regulators, in addition to investors, customers and the public in general, have been increasingly focused on Environmental, Social and Governance ("ESG") and cyber-security practices of companies. We may be subject to additional regulations and disclosure requirements in the future arising from the increased focus on ESG and cyber-security responsibility. In addition, customers may require us to implement or report on certain ESG responsible procedures or standards to continue doing business with us.

The occurrence of any of the foregoing could have a material impact on our financial condition or results of operations. Further, although we are very committed to compliance and safety, we could be subject to significant fines and penalties, our reputation could be adversely affected and/or we may incur significant costs to maintain or improve our compliance, if our businesses, or third parties with whom we have a relationship, were to fail to comply with such statutory and regulatory requirements.

Our operations are increasingly dependent upon technology. Failure of these technologies, failure to upgrade or innovate these technologies or failure to identify and develop new technologies could have an adverse impact on our results.

Our information technology systems are critical to our operations, customer experience and financial reporting. Malfunctions of these technologies, including disruptions due to natural or man-made disasters (e.g. terrorism, cyber intrusion), could interrupt operations or negatively impact our service to our customers and hurt our business reputation. System failures could also impede our ability to collect and report financial results timely or comply with regulations associated with our operations.

Identification of new and emerging technologies may be a risk and an opportunity to our business. Research and development of new technologies may require significant spending which may negatively impact our operating results and cash flows. Failure to innovate and focus on new technologies that provide superior alternatives to traditional environmental services, waste disposal or oil collection and re-refining service offerings may negatively impact our financial results.

A cyber security incident could negatively impact our business and our relationships with customers.

We use computers in substantially all aspects of our business operations and also mobile devices and other online technologies to connect with our employees and customers. Such uses give rise to cyber security risks, including security breach, espionage, system disruption, theft, disruption of our business operations, remediation costs for repairs of system damage and inadvertent release of information. Our business involves operational technology integral to our day to day business and the storage and transmission of numerous classes of sensitive and/or confidential information and intellectual property including, but not limited to, private information about employees and financial and strategic information about our Company and our business partners. Furthermore, as we pursue our strategy to grow through acquisitions and new initiatives that improve our operations and cost structure, we are also expanding and improving our information technologies, resulting in a larger technological presence and corresponding exposure to cyber security risk.

If we fail to assess and identify current cyber security risks and those associated with acquisitions and new initiatives, we may become increasingly vulnerable to such risks. While we have implemented measures to prevent security breaches and cyber incidents, our preventative measures and incident response efforts may not be entirely effective. The theft, destruction, loss, misappropriation or release of sensitive and/or confidential information or intellectual property, or interference with our operational technology, information technology systems or the technology systems of third parties on which we rely, could result in business disruption, negative publicity, damage to our assets, brand reputational damage, violation of privacy laws, loss of customers, potential liability and competitive disadvantage, which could have a material adverse effect on our financial position, results of operations or cash flows. Although we have from time to time experienced third party attacks on our computer systems which resulted in some business disruption while we responded, we believe that no such attack has resulted in any material disruptions or had any of the other material adverse consequences described above in this paragraph. Furthermore, while we maintain what we believe is sufficient insurance coverage that may (subject to certain policy terms and conditions, including deductibles) cover certain aspects of third-party security and cyber-risks and business interruption, our insurance coverage may not always cover all our costs or losses.

If we become unable to obtain, at reasonable cost, the insurance, surety bonds, letters of credit and other forms of financial assurance required for our facilities and operations, our business and results of operations would be adversely affected.

We are required to provide substantial amounts of financial assurance to government agencies for closure and post-closure care of our licensed hazardous waste treatment facilities and certain other permitted facilities should those facilities cease operation, and we are also occasionally required to post surety, bid and performance bonds in connection with certain customer projects. As of December 31, 2020, our total estimated closure and post-closure costs requiring financial assurance by regulators were $491.6 million for our U.S. facilities and $58.2 million for our Canadian facilities. We have obtained all of the required financial assurance for our facilities through a combination of surety bonds and insurance from qualified insurance companies. The financial assurance related to closure and post-closure obligations of our U.S. and Canadian facilities will renew at various dates throughout 2021.

Our ability to continue operating our facilities and conducting our operations would be adversely affected if we became unable to obtain sufficient insurance, surety bonds, letters of credit and other forms of financial assurance at reasonable cost to meet our regulatory and other business requirements. The availability of insurance, surety bonds, letters of credit and other forms of financial assurance is affected by our insurers', sureties' and lenders' assessment of our risk and by other factors outside of our control such as general conditions in the insurance and credit markets.

Our insurance coverage and self-insurance reserves may be inadequate to cover all significant risk exposures, and increasing costs to maintain adequate coverage may significantly impact our financial condition and results of operations.

We carry a range of insurance policies intended to protect our assets and operations, including general liability insurance, property damage, business interruption and environmental risk insurance. While we endeavor to purchase insurance coverage appropriate to our risk assessment, we are unable to predict with certainty the frequency, nature or magnitude of claims for direct or consequential damages, and as a result our insurance program may not fully cover us for losses we may incur.

As a result of a number of catastrophic weather and other events, insurance companies have incurred substantial losses and in many cases they have substantially reduced the nature and amount of insurance coverage available to the market, have broadened exclusions and/or have substantially increased the cost of such coverage. If this trend continues, we may not be able to maintain insurance of the types and coverage we desire at reasonable rates. A partially or completely uninsured claim against us (including liabilities associated with cleanup or remediation at our facilities), if successful and of sufficient magnitude, could have a material adverse effect on our business, financial condition and results of operations. Any future difficulty in obtaining insurance could also impair our ability to secure future contracts, which may be conditioned upon the availability of adequate insurance coverage. In addition, claims associated with risks for which we are to some extent self-insured (property, workers' compensation, employee medical, comprehensive general liability and vehicle liability) may exceed our recorded reserves, which could negatively impact future earnings.

Tax interpretations and changes in tax regulations and legislation could adversely affect our results of operations.

We are subject to income taxes in the United States, Canada, India and various state and local jurisdictions. Tax interpretations, regulations and legislation in the various jurisdictions in which we operate are subject to change and uncertainty and may impact our results of operations and cash flows. Our interpretation of tax rules and regulations, including those relating to foreign jurisdictions, requires judgment that may be challenged by taxation authorities upon audit. Although we believe our assumptions, judgments and estimates are reasonable, changes in tax laws or our interpretation of tax laws and the resolution of any tax audits could significantly impact the amounts provided for income taxes in our consolidated financial statements.

Fluctuations in foreign currency exchange could affect our financial results.

We earn revenues, pay expenses, own assets and incur liabilities in countries using currencies other than the U.S. Dollar. In particular, we recorded approximately 13.9% of our fiscal 2020 direct revenues in Canada. Because our consolidated financial statements are presented in U.S. Dollars, we must translate revenues, income and expenses as well as assets and liabilities into U.S. Dollars at exchange rates in effect during or at the end of each reporting period. Therefore, increases or decreases in the value of the U.S. Dollar against other currencies in countries where we operate affect our results of operations and the value of balance sheet items denominated in foreign currencies.

Failure to correctly identify and manage acquisitions and divestitures could adversely impact our future results.

We continuously evaluate potential acquisition candidates and from time to time acquire companies that we believe will strategically fit into our business and growth objectives. If we are unable to successfully integrate and develop acquired businesses, we could fail to achieve anticipated synergies and cost savings, including any expected increases in revenues and operating results, which could have a material adverse effect on our financial results. We also continually review our portfolio of assets to determine the extent to which assets or groups of assets are contributing to our objectives and growth strategy. When we decide to sell a business or specific asset group, we may be unable to do so on satisfactory terms and within our anticipated time frame.

We have acquired, and generally expect to acquire, all the outstanding shares, as opposed to assets, of our more significant acquired companies. Due to this acquisition method our investment in those companies is or will be subject to all of their liabilities other than their respective debts which we paid or will pay at the time of the acquisitions. Unknown liabilities or other obligations may adversely affect our financial condition and results of operations.

Certain adverse conditions have required, and future conditions might require, us to make substantial write-downs in our assets, which have adversely affected or would adversely affect our balance sheet and results of operations.

We review our long-lived tangible and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. We also test our goodwill and indefinite-lived intangible assets for impairment at least annually on December 31, or when events or changes in the business environment indicate that the carrying value of a reporting unit or indefinite lived intangible may exceed its fair value. During each of 2020, 2019 and 2018, we determined that no asset write-downs were required. However, if conditions in any of the businesses in which we operate were to deteriorate, we could determine that certain of our assets are impaired and we would then be required to write-off all or a portion of the value of such assets. Any significant write-offs would adversely affect our balance sheet and results of operations.

Our growth and success are dependent upon our people. If we lose key personnel and are unable to hire additional qualified personnel in a timely manner, our business may be harmed. A change or deterioration in our relations with our employees could have a materially adverse effect on our business, financial condition and results of operations.

Our ability to continue to grow, operate our facilities and provide our services is dependent upon the expertise of certain key managerial and technical personnel. The market for skilled and experienced personnel is highly competitive. Our ability to retain key personnel and/or attract new qualified personnel may have an impact on our business and financial results.

We put the safety of our employees at the heart of what we do and believe we have a positive relationship with our workforce. However, if our relationship with our employees were to deteriorate we could be required to incur additional costs related to wages and benefits, inefficiencies in operations, unanticipated costs in sourcing temporary or third-party labor and interference with customer relations.

Natural disasters or other catastrophic events, including pandemics, could negatively affect our business, financial condition and results of operations.

Natural disasters such as hurricanes, tornados or earthquakes or other catastrophic events including public health threats or outbreaks of communicable diseases such as the recent COVID-19 pandemic could negatively affect our operations and financial performance. The impact of such events could include physical damage to one or more of our facilities or equipment, the temporary lack of an adequate workforce in a market and the temporary disruption in rail or truck transportation services upon which we rely. These events could prevent or delay shipments from suppliers or to customers and reduce both volumes and revenue.

Weather conditions and other event driven special projects also cause interim variations in our results. These events could adversely impact the ability of the Company's suppliers and customers to conduct business activities and could ultimately do so for an indefinite period of time. As a result, we may be required to suspend operations in some or all of our locations, which could have a material adverse effect on our business, financial condition and results of operations.

Additional Risks Affecting Our Environmental Services Business

The hazardous waste management business which our Environmental Services segment operates is subject to significant environmental liabilities.

We have accrued environmental liabilities valued as of December 31, 2020 at $202.7 million, substantially all of which we assumed in connection with certain acquisitions. We calculate our environmental liabilities on a present value basis in accordance with generally accepted accounting principles, which take into consideration both the amount of such liabilities and the timing when we project that we will be required to pay them. We anticipate our environmental liabilities will be payable over many years and that cash flows generated from our operations will generally be sufficient to fund the payment of such liabilities when required. However, events not now anticipated (including future changes in environmental laws and regulations or their enforcement) could require that such payments be made earlier or in greater amounts than we now estimate, which could adversely affect our financial condition, results of operations and cash flows.

We may also assume additional environmental liabilities as part of future acquisitions. Although we will endeavor to accurately estimate and limit environmental liabilities presented by the businesses or facilities to be acquired, some liabilities, including ones that may exist only because of the past operations of an acquired business or facility, may prove to be more difficult or costly to address than we then estimate. It is also possible that government officials responsible for enforcing environmental laws may believe an environmental liability is more significant than we then estimate, or that we will fail to identify or fully appreciate an existing liability before we become legally responsible to address it.

The hazardous waste management industry in which we participate is subject to significant economic and business risks.

The future operating results of our Environmental Services segment may be affected by such factors as our ability to utilize our facilities and workforce profitably in the face of intense price competition, maintain or increase market share in an industry which has in the past experienced significant downsizing and consolidation, realize benefits from cost reduction programs, generate incremental volumes of waste to be handled through our facilities from existing and acquired sales offices and service centers, obtain sufficient volumes of waste at prices which produce revenue sufficient to offset the operating costs of our facilities, minimize downtime and disruptions of operations and develop our field services business. In particular, economic downturns or recessionary conditions in North America, and increased outsourcing by North American manufacturers to plants located in countries with lower wage costs and less stringent environmental regulations, have adversely affected and may in the future adversely affect the demand for our services. Our Environmental Services business is also cyclical to the extent that it is dependent upon a stream of waste from cyclical industries such as chemical and petrochemical. If those cyclical industries slow significantly, the business that we receive from them would likely decrease.

The extensive environmental regulations to which we are subject may increase our costs and potential liabilities and limit our ability to expand our facilities.

Our operations and those of others in the environmental services industry are subject to extensive federal, state, provincial and local environmental requirements in both the United States and Canada, including those relating to emissions to air, discharged wastewater, storage, treatment, transport and disposal of regulated materials and cleanup of soil and groundwater contamination. In particular, if we fail to comply with government regulations governing the transport of hazardous materials, such failure could negatively impact our ability to collect, process and ultimately dispose of hazardous waste generated by our customers. Efforts to conduct our operations in compliance with all applicable laws and regulations, including environmental rules and regulations, require programs to promote compliance, such as training employees and customers, purchasing health and safety equipment and in some cases hiring outside consultants and lawyers. Even with these programs, we and other companies in the environmental services industry are routinely faced with government enforcement proceedings, which can result in fines or other sanctions and require expenditures for remedial work on waste management facilities and contaminated sites. Certain of these laws impose strict and, under certain circumstances, joint and several liability on current and former owners and operators of facilities that release regulated materials or that generate those materials and arrange for their disposal or treatment at contaminated sites. Such liabilities can relate to required cleanup of releases of regulated materials and related natural resource damages. The landscape of environmental regulation to which we are subject can change. Changes to environmental regulation often present new business opportunities for us; however, such changes may also result in increased operating and compliance costs or, in more significant cases, changes to how our facilities are able to operate. We constantly monitor the landscape of environmental regulation; however, our ability to navigate through any changes to such regulations may result in a material effect on our operations, cash flows or financial condition.

From time to time, we have paid fines or penalties in government environmental enforcement proceedings, usually involving our waste treatment, storage and disposal facilities. Although none of these fines or penalties that we have paid in the past has had a material adverse effect upon us, we might in the future be required to make substantial expenditures as a result of government proceedings which would have a negative impact on our financial condition and results of operations. Furthermore, regulators have the power to suspend or revoke permits or licenses needed for operation of our plants, equipment, and vehicles based on, among other factors, our compliance record, and customers may decide not to use a particular disposal facility or do business with us because of concerns about our compliance record. Suspension or revocation of permits or licenses would impact our operations and could have a material impact on our financial results. Although we have never had any of our facilities' operating permits revoked, suspended or non-renewed involuntarily, it is possible that such an event could occur in the future.

Some environmental laws and regulations impose liability and responsibility on present and former owners, operators or users of facilities and sites for contamination at such facilities and sites without regard to causation or knowledge of contamination. Past practices have resulted in releases of regulated materials at and from certain of our facilities, or the disposal of regulated materials at third-party sites, which may require investigation and remediation, and potentially result in claims of personal injury, property damage and damages to natural resources. In addition, we occasionally evaluate various alternatives with respect to our facilities, including possible dispositions or closures. Investigations undertaken in connection with these activities may lead to discoveries of contamination that must be remediated, and closures of facilities might trigger compliance requirements that are not applicable to operating facilities. We are currently conducting remedial activities at certain of our facilities and paying a portion of the remediation costs at certain sites owned by third parties. While, based on available information, we believe these remedial activities will not result in a material effect upon our operations or financial condition, these activities or the discovery of previously unknown conditions could result in material costs.

In addition to the costs of complying with environmental laws and regulations, we incur costs defending against environmental litigation brought by government agencies and private parties. We are now, and may in the future be, a defendant in lawsuits brought by parties alleging environmental damage, personal injury and/or property damage, which may result in our payment of significant amounts.

Environmental and land use laws also impact our ability to expand our facilities. In addition, we are required to obtain government permits to operate our facilities, including all of our landfills. Even if we comply with all applicable environmental laws, we might not be able to obtain requisite permits from applicable government authorities to extend or modify such permits to fit our business needs.

If our assumptions relating to expansion of our landfills should prove inaccurate, our results of operations and cash flow could be adversely affected.

When we include permitted or probable expansion airspace in our calculation of available airspace, we adjust our landfill liabilities to the present value of projected costs for cell closure and landfill closure and post-closure. It is possible that our estimates or assumptions could ultimately turn out to be significantly different from actual results. In some cases we may be unsuccessful in obtaining an expansion permit or we may determine that an expansion permit is no longer probable. To the extent that such estimates, or the assumptions used to make those estimates, prove to be significantly different than actual results, or our beliefs that we will receive expansion permits change adversely in a significant manner, our landfill assets, including the assets incurred in the pursuit of the expansion, may be subject to impairment. Furthermore, lower prospective profitability may result due to increased interest accretion and depreciation or asset impairment charges related to the removal of previously included expansion airspace, in addition to the loss of future revenue related to the loss of probable airspace. Further, if our assumptions concerning expansion airspace should prove inaccurate, certain of our cash expenditures for closure of landfills could be accelerated and adversely affect our results of operations and cash flow.

A significant portion of our Environmental Services business depends upon the demand for cleanup of major spills and other remedial projects and regulatory developments over which we have no control.

Our operations can be affected by the commencement and completion of cleanup of major spills and other events, customers' decisions to undertake remedial projects, seasonal fluctuations due to weather and budgetary cycles influencing the timing of customers' spending for remedial activities, the timing of regulatory decisions relating to hazardous waste management projects, changes in regulations governing the management of hazardous waste, secular changes in the waste processing industry towards waste minimization and the propensity for delays in the demand for remedial services and changes in the myriad of government regulations governing our diverse operations. We do not control such factors and, as a result, our revenue and income can vary from quarter to quarter, and past financial results for certain quarters may not be a reliable indicator of future results for comparable quarters in subsequent years.

Additional Risks Affecting Our Safety-Kleen Business

Reductions in the demand for oil products and automotive services in the markets we serve may negatively affect our Safety-Kleen business.

A significant portion of our Safety-Kleen business involves collecting used oil from certain of our customers, re-refining a portion of such used oil into base and blended lubricating oils and then selling both such re-refined oil and the recycled oil to other customers. Reduced demand for oil products, whether temporary due to market conditions or a lasting trend, may also lower demand for our services of collecting used oil and, in turn, reduce our feedstock oil volumes for processing through our re-refineries. There are significant fixed costs associated with operating our re-refinery facilities and should production volumes at these facilities decrease, our results of operations and profitability may be materially impacted.

Safety-Kleen's core service offerings are inextricably connected to the automotive industry. Miles driven and routine automotive maintenance, along with other automotive industry trends, impact demand for parts-washer services, containerized waste collections and vacuum services. Declines in this industry, whether temporary or a lasting trend, may reduce the demand for these core service offerings which may adversely impact our financial results.

Environmental laws and regulations have adversely affected and may adversely affect Safety-Kleen's parts cleaning and other solvent related services.

In connection with its parts cleaning and other solvent related services, Safety-Kleen has been subject to fines and certain orders requiring it to take environmental remedial action. Safety-Kleen may also be subject to monetary fines, civil or criminal penalties, remediation, cleanup or stop orders, injunctions, orders to cease or suspend certain practices or denial of permits required for the operation of its facilities. The outcome of any proceeding and associated costs and expenses could have a material adverse impact on Safety-Kleen’s financial condition and results of operations.

Recent and potential changes in environmental laws and regulations may also adversely affect future Safety-Kleen parts cleaning and other solvent related services. Interpretation or enforcement of existing laws and regulations, or the adoption of new laws and regulations, may require Safety-Kleen to modify or curtail its parts cleaning operations or replace or upgrade its facilities or equipment at substantial cost, which we may not be able to pass on to our customers, and we may choose to indemnify our customers from any fines or penalties they may incur as a result of these new laws and regulations. On the other hand, in some cases if new laws and regulations are less stringent, Safety-Kleen’s customers or competitors may be able to manage waste more effectively themselves, which could decrease the need for Safety-Kleen’s parts cleaning and other solvent related services or increase competition, which could adversely affect Safety-Kleen’s results of operations.

Safety-Kleen is subject to existing and potential product liability lawsuits.

Safety-Kleen has been named from time to time as a defendant in product liability lawsuits in various courts and jurisdictions throughout the United States. As of December 31, 2020, Safety-Kleen was involved in approximately 68 such proceedings (including cases which have been settled but not formally dismissed) wherein persons claim personal injury resulting from the use of its parts cleaning equipment or cleaning products. These proceedings typically involve allegations that the solvents used in Safety-Kleen’s parts cleaning equipment contain contaminants or that Safety-Kleen’s recycling process does not effectively remove the contaminants that become entrained in the solvents during their use. In addition, certain claimants assert that Safety-Kleen failed to adequately warn the product user of potential risks, including a historic failure to warn that such solvents contain trace amounts of toxic or hazardous substances such as benzene.

Safety-Kleen maintains insurance that we believe will provide coverage for these claims (over amounts accrued for self-insured retentions and deductibles in certain limited cases). This insurance may not provide coverage for potential awards of punitive damages against Safety-Kleen. Although Safety-Kleen has vigorously defended and will continue to vigorously defend itself and the safety of its products against all of these claims, these lawsuits are subject to many uncertainties and outcomes cannot be predicted with assurance. Safety-Kleen may also be named in additional product liability lawsuits in the future, including claims for which insurance coverage may not be available. If any one or more of these lawsuits were decided unfavorably against Safety-Kleen and the plaintiffs were awarded punitive damages, or if insurance coverage were not available for any such claim, our financial condition and results of operations could be materially and adversely affected. Additionally, if any one or more of these lawsuits were decided unfavorably against Safety-Kleen, such outcome may encourage more lawsuits against us.

Risks Relating to Our Levels of Debt and Letters of Credit

Our substantial levels of outstanding debt and letters of credit could adversely affect our financial condition and ability to fulfill our obligations.

As of December 31, 2020, we had outstanding $845.0 million of senior unsecured notes, $727.2 million of senior secured term loans, and $120.6 million of letters of credit. Our substantial levels of outstanding debt and letters of credit may:

- adversely impact our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions or other general corporate purposes or to repurchase our senior unsecured notes from holders upon any change of control;
- require us to dedicate a substantial portion of our cash flow to payment of interest on our debt and fees on our letters of credit, which reduces the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes;
- subject us to the risk of increased sensitivity to interest rate increases based upon variable interest rates, including interest on $377.2 million of our $727.2 million senior secured term loans for which we do not currently have interest rate hedges and borrowings (if any) under our revolving credit facility;
- increase the possibility of an event of default under the financial and operating covenants contained in our debt instruments; and

- limit our ability to adjust to rapidly changing market conditions, reduce our ability to withstand competitive pressures and make us more vulnerable to a downturn in general economic conditions of our business than our competitors with less debt.

Our ability to make scheduled payments of principal or interest with respect to our debt, including our outstanding senior unsecured notes, our secured term loans, any revolving loans and our finance leases, and to pay fee obligations with respect to our letters of credit, will depend on our ability to generate cash and our future financial results. If we were unable to generate sufficient cash flow from operations in the future to service our debt and letter of credit fee obligations, we might be required to refinance all or a portion of our existing debt and letter of credit facilities or to obtain new or additional such facilities. However, we might not be able to obtain any such new or additional facilities on favorable terms or at all.

Despite our substantial levels of outstanding debt and letters of credit, we could incur substantially more debt and letter of credit obligations in the future.

Although our revolving credit agreement and the indenture and loan agreement governing our other outstanding debt contain restrictions on the incurrence of additional debt (including, for this purpose, reimbursement obligations under outstanding letters of credit), these restrictions are subject to a number of qualifications and exceptions and the additional debt which we might incur in the future in compliance with these restrictions could be substantial. In particular, as of December 31, 2020, we had up to approximately $264.0 million available for additional borrowings and letters of credit under our revolving credit facility. Our revolving credit agreement and the indenture and loan agreement governing our other outstanding debt also allow us to borrow significant amounts of money from other sources. These restrictions also do not prevent us from incurring obligations (such as operating leases) that do not constitute “debt” or “indebtedness” as defined in the relevant agreements. To the extent we incur in the future additional debt and letter of credit or other obligations, the related risks would increase.

The covenants in our debt agreements restrict our ability to operate our business and might lead to a default under our debt agreements.

Our revolving credit agreement and the indenture and loan agreement governing our other outstanding debt limit, among other things, the extent to which the Company or our restricted subsidiaries can:

- incur or guarantee additional indebtedness (including, for this purpose, reimbursement obligations under letters of credit) or issue preferred stock;
- pay dividends or make other distributions to our stockholders;
- purchase or redeem capital stock or subordinated indebtedness;
- make investments;
- create liens;
- incur restrictions on the ability of our restricted subsidiaries to pay dividends or make other payments to us;
- sell assets, including capital stock of our subsidiaries;
- consolidate or merge with or into other companies or transfer all or substantially all of our assets; and
- engage in transactions with affiliates.

As a result of these covenants, we may not be able to respond to changes in business and economic conditions and to obtain additional financing, if needed, and we may be prevented from engaging in transactions that might otherwise be beneficial to us. Our revolving credit facility requires, and our future credit facilities may require, us to maintain under certain circumstances certain financial ratios and satisfy certain other financial condition tests. Our ability to meet these financial ratios and tests can be affected by events beyond our control, and we may not be able to meet those tests. The breach of any of these covenants could result in a default under our outstanding or future debt. Upon the occurrence of an event of default, the lenders could elect to declare all amounts outstanding under such debts, including accrued interest or other obligations, to be immediately due and payable. If amounts outstanding under such debts were accelerated, our assets might not be sufficient to repay in full those debts.

Our revolving credit agreement and the indenture and loan agreement governing our other outstanding debt also contain cross-default and cross-acceleration provisions. Under these provisions, a default or acceleration under one instrument governing our debt may constitute a default under our other debt instruments that contain cross-default and cross-acceleration provisions, which could result in the related debt and the debt under such other instruments becoming immediately due and payable. In such event, we would need to raise funds from alternative sources, which funds might not be available to us on favorable terms, on a timely basis or at all. Alternatively, such a default could require us to sell assets and otherwise curtail operations to pay our creditors. The proceeds of such a sale of assets or curtailment of operations might not enable us to pay all of our liabilities.

Other Risks Relating to Our Common Stock

The Massachusetts Business Corporation Act and our By-Laws contain certain anti-takeover provisions.

Sections 8.06 and 7.02 of the Massachusetts Business Corporation Act provide that Massachusetts corporations which are publicly-held must have a staggered board of directors and that written demand by holders of at least 40% of the outstanding shares of each relevant voting group of stockholders is required for stockholders to call a special meeting unless such corporations take certain actions to affirmatively "opt-out" of such requirements. In accordance with these provisions, our By-Laws provide for a staggered board of directors which consists of three classes of directors of which one class is elected each year for a three-year term, and require that written application by holders of at least 25% (which is less than the 40% which would otherwise be applicable without such a specific provision in our By-Laws) of our outstanding shares of common stock is required for stockholders to call a special meeting. In addition, our By-Laws prohibit the removal by the stockholders of a director except for cause. These provisions could inhibit a takeover of our Company by restricting stockholders' action to replace the existing directors or approve other actions which a party seeking to acquire us might propose. A takeover transaction would frequently afford stockholders an opportunity to sell their shares at a premium over then market prices.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our principal executive offices are in Norwell, Massachusetts. We own our primary executive office building in Massachusetts which occupies 104,000 square feet. We also currently lease 52,400 square feet of additional office space in Norwell, Massachusetts under arrangements which may not expire until 2042. We have regional administrative offices in Texas and South Carolina, as well as Alberta, Canada and Hyderabad, India. Our properties are sufficient and suitable for our current needs.

We have a network of more than 485 service locations across 49 states, eight Canadian provinces, Puerto Rico and Mexico. Those service locations include service centers, satellite locations, branches, active hazardous waste management properties, lodging facilities and oil processing facilities. Some of our properties offer multiple capabilities. The following sets forth certain information as of December 31, 2020 regarding our properties.

Service Centers, Satellite Locations and Branches

We have approximately 353 service centers, satellite locations and branches throughout the United States and Canada which serve as principal sales and service centers from which we provide our environmental and industrial services for the Environmental Services business and our parts cleaning, containerized waste and oil collection services for our Safety-Kleen business.

Active Hazardous Waste Management Properties

Incinerator Facilities. We own and operate five incinerator facilities that have a total of nine incinerators with 561,721 tons of total practical capacity and an overall average utilization rate for 2020 of 84.1%. Our practical capacity is not based on a theoretical 24-hour, seven-day operation, but rather is determined as the production level at which our incinerators can operate with an acceptable degree of efficiency, taking into consideration factors such as longer term customer demand, permanent staffing levels, operating shifts, holidays, scheduled maintenance and mix of product. Capacity utilization is calculated by dividing actual production tons by practical capacity at each incinerator. The following table summarizes the practical capacity and utilization for each incinerator for the year ended December 31, 2020:

	# of Incinerators	Practical Capacity (Tons)	Utilization Rate Year Ended December 31, 2020
Arkansas	3	145,072	90.9 %
Nebraska	1	58,808	82.9 %
Utah	1	66,815	81.7 %
Texas	3	165,500	79.5 %
Ontario, Canada	1	125,526	84.2 %
	9	561,721	84.1 %

Our incinerators offer a wide range of technological capabilities to customers through this network. We provide incineration in the United States through one fluidized bed thermal oxidation unit and three solids and liquids-capable incinerator facilities and we operate in Canada one active hazardous waste liquid injection incinerator.

Commercial and Non-Commercial Landfills. In the United States and Canada, we now operate seven commercial landfills with approximately 24.5 million cubic yards of remaining highly probable airspace. Six of our commercial landfills are designed and permitted for the disposal of hazardous waste and one landfill is operated for nonhazardous industrial waste disposal and, to a lesser extent, municipal solid waste. In addition to our commercial landfills, we also own and operate two non-commercial landfills that only accept waste from our on-site incinerators. During 2020, we took actions to begin the closure of our Altair and Westmorland commercial landfills. Altair, a nonhazardous landfill, reached permitted capacity during the year. The Company decided to close the Westmorland landfill, a hazardous landfill, due to the cost of obtaining and maintaining permits and operating the landfill. These landfills are excluded from the landfill counts above. See "Landfill Final Closure and Post-Closure Liabilities" within "Critical Accounting Policies and Estimates" included in Item 7 of this report and "Landfill Accounting" within Note 2, "Significant Accounting Policies," to our consolidated financial statements included in Item 8 of this report for additional information on our commercial and non-commercial landfills.

Wastewater Treatment Facilities. We operate a total of nine facilities, of which eight are owned and one is leased, that offer a range of wastewater treatment technologies and services. Wastewater treatment consists primarily of three types of services: hazardous wastewater treatment, sludge de-watering or drying and non-hazardous wastewater treatment.

Treatment, Storage and Disposal Facilities. We operate 27 TSDFs, of which 24 are owned and three are leased, in the United States and Canada. Our TSDFs facilitate the movement of materials among our network of service centers and treatment and disposal facilities. Transportation may be accomplished by truck, rail, barge or a combination of modes, with our own assets or in conjunction with third-party transporters. Specially designed containment systems, vehicles and other equipment permitted for waste transport, together with drivers trained in transportation and waste handling procedures, provide for the movement of customer waste streams.

Other Hazardous Waste Management Properties. We own two facilities specializing in solvent recovery management. We also own one autoclave facility specifically designed to treat medical waste.

Oil Processing, Blending and Packaging Facilities

Oil Terminals. We operate a total of 69 oil terminals, of which 40 are owned and 29 are leased, which collect or process used oil prior to delivery to our re-refineries or distribution as recycled fuel oil.

Oil Recycling and Re-refining Facilities. We own seven oil re-refineries, six in the United States and one in Canada. With nearly 200.0 million gallons of used oil processed annually, we were able to return 166 million gallons of new re-refined oil, lubricants and byproducts back into the marketplace in 2020.

Oil Packaging and Blending Facilities. We operate a total of five oil packaging and blending facilities, of which three are owned and two are leased, which are used for blending and packaging oil from our branches.

ITEM 3. LEGAL PROCEEDINGS

See Note 17, "Commitments and Contingencies," to our consolidated financial statements included in Item 8 of this report for a description of legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Common Stock

Our common stock trades on the New York Stock Exchange ("NYSE") under the symbol CLH. On February 17, 2021, there were 256 stockholders of record of our common stock, excluding stockholders whose shares were held in nominee, or "street name" accounts through brokers or banks. On our last record date, 21,875 additional stockholders beneficially held shares in street name accounts.

We have never declared nor paid any cash dividends on our common stock, and we do not intend to pay any dividends on our common stock in the foreseeable future. We intend to retain our future earnings, if any, for use in the operation and expansion of our business, payment of our outstanding debt and for our stock repurchase program. In addition, our current revolving credit agreement and the indenture and loan agreement governing our other outstanding debt limit the amount we could pay as cash dividends on or for repurchase of our common stock. For additional information surrounding our stock repurchase program, see Note 14, "Stockholders' Equity," to our consolidated financial statements included in Item 8 of this report.

Securities Authorized For Issuance Under Equity Compensation Plans

See Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters," for a description of the securities which are authorized for issuance under our equity compensation plans.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share (2)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (3) (in thousands)
October 1, 2020 through October 31, 2020	288	$ 56.37	—	$ 245,149
November 1, 2020 through November 30, 2020	501,819	70.53	500,000	209,852
December 1, 2020 through December 31, 2020	11,139	72.97	—	209,852
Total	513,246		500,000	

(1) Includes 13,246 shares withheld by us from employees to satisfy employee tax obligations upon vesting of restricted shares granted under our long-term equity incentive programs.

(2) The average price paid per share of common stock repurchased under our stock repurchase program includes commissions paid to the brokers.

(3) Our board of directors has authorized the repurchase of up to $600.0 million of our common stock. We have funded and intend to fund the repurchases through available cash resources. The stock repurchase program authorizes us to purchase our common stock on the open market or in privately negotiated transactions periodically in a manner that complies with applicable U.S. securities laws. The number of shares purchased and the timing of the purchases has depended and will depend on several factors, including share price, cash required for business plans, trading volume and other conditions. In November 2020, we implemented a repurchase plan in accordance with Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended. Future repurchases will be made under the Rule 10b5-1 plan as well as open market or privately negotiated transactions as described above. We have no obligation to repurchase stock under this program and may suspend or terminate the repurchase program at any time.

COMPARISON OF 5-YEAR CUMULATIVE TOTAL RETURN

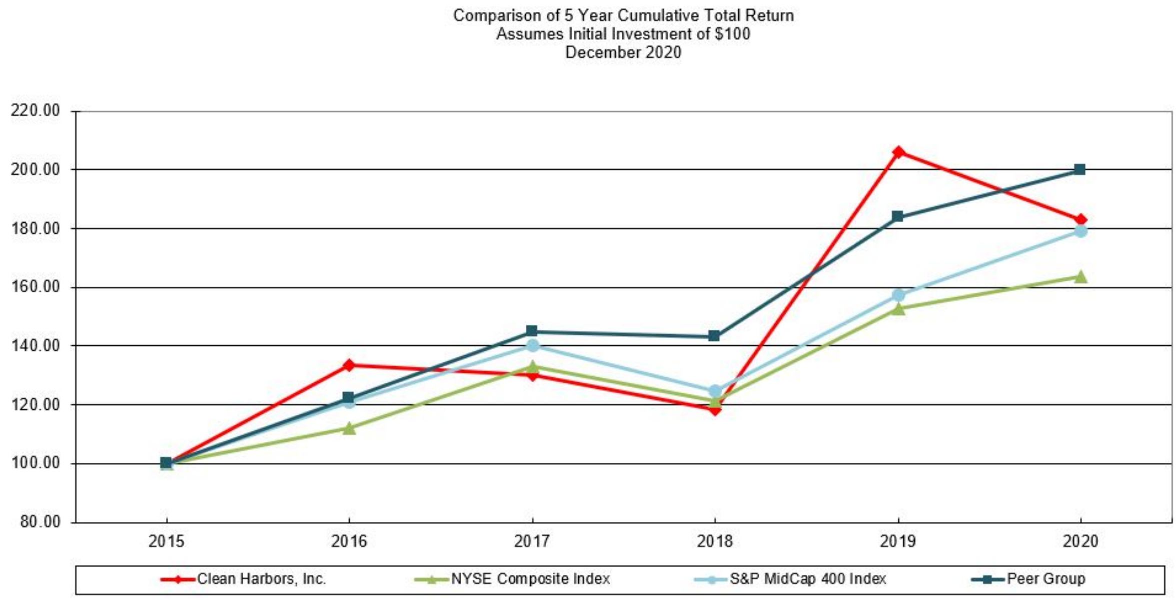
AMONG CLEAN HARBORS, INC.,

NYSE COMPOSITE INDEX, S&P MIDCAP 400 INDEX, REFUSE SYSTEMS AND CUSTOM PEER GROUP

Performance Graph

The following graph compares the five-year return from investing $100 in each of our common stock, the NYSE Composite Index, the S&P Midcap 400 Index, and a custom peer group. We selected a custom peer group that closely aligns with the breadth and size of our business. This peer group is comprised of American Water Works Company, Inc., Casella Waste Systems, Inc., Civeo Corporation, Covanta Holding Corporation, Heritage-Crystal Clean, Inc., Iron Mountain Incorporated, Newpark Resources, Inc., Oil States International, Inc., Republic Services, Inc., Stericycle, Inc., Superior Energy Services, Inc., US Ecology, Inc., and Waste Management, Inc. In 2019, we removed the Refuse Systems comparative, which had previously been included in the Comparison of 5-Year Cumulative Total Return chart below, because we believe our custom peer group is more relevant.

The values illustrated assume reinvestment of dividends on the ex-dividend date and compares relative performance since a particular starting date. In this instance, the starting date was December 31, 2015, when our common stock closed at $41.65 per share. The graph is presented pursuant to SEC rules and is not meant to be an indication of our future performance.



ITEM 6. SELECTED FINANCIAL DATA

The following summary of consolidated financial information has been derived from the audited consolidated financial statements included in Item 8, "Financial Statements and Supplementary Data," of this report and in the Form 10-Ks we previously filed with the SEC. This information should be reviewed in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the financial statements and notes thereto included in Item 8, "Financial Statements and Supplementary Data," of this report.

	For the years ended December 31,				
(in thousands, except per share amounts)	2020	2019	2018	2017	2016
Statement of Operations Data:					
Total revenues	$ 3,144,097	$ 3,412,190	$ 3,300,303	$ 2,944,978	$ 2,755,226
Net income (loss) (1)	134,837	97,740	65,636	100,739	(39,873)
Earnings (loss) per share: (1)					
Basic	2.43	1.75	1.17	1.77	(0.69)
Diluted	2.42	1.74	1.16	1.76	(0.69)
Other Financial Data:					
Adjusted EBITDA (2)	555,302	540,317	491,005	425,657	400,354

	As of December 31,				
(in thousands)	2020	2019	2018	2017	2016
Balance Sheet Data:					
Total assets	$ 4,131,520	$ 4,108,904	$ 3,738,321	$ 3,706,570	$ 3,681,920
Long-term debt (including current portion)	1,557,176	1,561,651	1,572,556	1,629,537	1,633,272
Stockholders' equity	1,341,551	1,269,813	1,169,756	1,188,202	1,084,241

---

(1) The 2017 results include a net benefit of $93.0 million resulting from impacts of the tax law changes enacted in December of 2017, a $7.9 million pre-tax loss on early extinguishment of debt and a $30.7 million pre-tax gain on the sale of a non-core line of business within our Environmental Services segment. The 2016 results include a $34.0 million goodwill impairment charge and a $16.9 million pre-tax gain on the sale of a non-core line of business within our Environmental Services segment. In 2016, we did not record any income tax benefit as a result of the goodwill impairment charge.

(2) The following is a reconciliation of net income (loss) to Adjusted EBITDA for the following periods (in thousands). See additional information regarding this non-GAAP measure under the heading *"Adjusted EBITDA"* in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," of this report.

	For the years ended December 31,				
(in thousands, except for percentages)	2020	2019	2018	2017	2016
Net income (loss)	$ 134,837	$ 97,740	$ 65,636	$ 100,739	$ (39,873)
Accretion of environmental liabilities	11,051	10,136	9,806	9,460	10,177
Depreciation and amortization	292,915	300,725	298,625	288,422	287,002
Goodwill impairment charge	—	—	—	—	34,013
Other expense (income), net	290	(2,897)	4,510	6,119	(6,195)
Loss on early extinguishment of debt	—	6,131	2,488	7,891	—
Loss (gain) on sale of businesses	3,376	(687)	—	(30,732)	(16,884)
Interest expense, net of interest income	73,120	78,670	81,094	85,808	83,525
Provision (benefit) for income taxes	39,713	50,499	28,846	(42,050)	48,589
Adjusted EBITDA	$ 555,302	$ 540,317	$ 491,005	$ 425,657	$ 400,354
As a percentage of total revenues	17.7 %	15.8 %	14.9 %	14.5 %	14.5 %

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

We are North America's leading provider of environmental and industrial services supporting our customers in finding environmentally responsible solutions to further their sustainability goals in today's world. Everywhere industry meets the environment, we strive to provide eco-friendly products and services that protect and restore North America's natural environment. We believe we operate, in the aggregate, the largest number of hazardous waste incinerators, landfills and treatment, storage and disposal facilities ("TSDFs") in North America. We serve a diverse customer base, including Fortune 500 companies, across the chemical, energy, manufacturing and additional markets, as well as numerous government agencies. These customers rely on us to deliver a broad range of services including but not limited to end-to-end hazardous waste management, emergency response, industrial cleaning and maintenance and recycling services. We are also the largest re-refiner and recycler of used oil in North America and the largest provider of parts cleaning and related environmental services to commercial, industrial and automotive customers in North America.

We have two operating segments*;* (i) the Environmental Services segment and (ii) the Safety-Kleen segment. Performance of our segments is evaluated on several factors of which the primary financial measure is Adjusted EBITDA, as reconciled to our net income and described more fully below. The following is a discussion of how management evaluates its segments including key performance indicators that management uses to assess the segments' results, as well as certain macroeconomic trends and influences that impact each reportable segment:

- **Environmental Services** - Environmental Services segment results are predicated upon the demand by our customers for waste services directly attributable to waste volumes generated by them and project work for which waste handling and/or disposal is required. In managing the business and evaluating performance, management tracks the volumes and mix of waste handled and disposed of through our incinerators, TSDFs and landfills, as well as utilization of such incinerators, labor and billable hours and equipment among other key metrics. Levels of activity and ultimate performance associated with this segment can be impacted by several factors including overall U.S. GDP and U.S. industrial production, weather conditions, efficiency of our operations, technology, changing regulations, competition, market pricing of our services and the management of our related operating costs. Environmental Services results are also impacted by the demand for planned and unplanned industrial related cleaning and maintenance services at customer sites and for environmental cleanup services on a scheduled or emergency basis, including response to national events such as major chemical spills, natural disasters or other events where immediate and specialized services are required. As a result of the recent coronavirus ("COVID-19") pandemic, the business has also seen increased demand for contagion disinfection, decontamination and disposal response services.

- **Safety-Kleen** - Safety-Kleen segment results are impacted by an array of core service and product offerings that serve to attract small quantity waste producers as customers and integrate them into the Clean Harbors waste network. Core service offerings include parts washer services, containerized waste services, vac services, used motor oil collection and contract blending and packaging services. Key performance indicators tracked by the Company relative to these services include the number of parts washers placed and services performed and pricing and volume of used motor oil and waste collected. Results from these services are primarily driven by the overall number of parts washers placed and services performed at customer sites and volumes of waste collected, as well as the demand for and frequency of other offered services. These factors can be impacted by overall economic conditions in the marketplace, especially in the automotive and manufacturing related areas. Both the overall market price of oil and regulations that change the number of potential outlets for used motor oil, including the International Maritime Organization's 2020 regulation, impact the premium the segment can charge for used motor oil collections. In addition to its core service offerings, Safety-Kleen also offers high quality, eco-friendly recycled base and blended oil products to end users including fleet customers, distributors and manufacturers of oil products. Other product offerings include automotive related fluids and shop supplies. Relative to its oil related products, management tracks the Company's volumes and relative percentages of base and blended oil sales along with various pricing metrics associated with this commodity driven marketplace. The segment's revenues are significantly impacted by overall market pricing and product mix associated with base and blended oil products. The segment's results are impacted by the Company's ability to manage the pricing for used oil collections with the overall market pricing for base and blended oil products. Costs incurred in connection with the collection of used oil and other raw materials associated with the segment's oil related products can also fluctuate. Our OilPlus® closed loop initiative, which results in the sale of our renewable oil products directly to our end customers, may also be impacted by changes in customer demand for high-quality, environmentally responsible recycled oil.

Impacts of COVID-19

Corporate Response

In response to the COVID-19 pandemic, the Company created a dedicated crisis response team to proactively monitor and respond to Company and customer operations, implement plans to execute on opportunities from COVID-19 related decontamination services and enhance health and safety measures for all our employees as well as customers to which we have provided these services.

Health and safety is our #1 priority. Our commitment to ensuring the health and safety of our employees, particularly those performing COVID-19 decontamination services for our customers is a pillar of our overall corporate culture. During the pandemic, we have been able to successfully supply our employees with appropriate personal protective equipment ("PPE") for use in servicing our customers in the field and working at our operational and administrative facilities. To support the safety of all of our employees and operations, early precautionary measures were implemented including actively monitoring and reporting employee illness, acquiring and maintaining adequate levels of PPE inventory, suspending non-essential travel, limiting the number of employees attending meetings and reducing the number of people at our locations at any one time. In an effort to contain COVID-19, governments have enacted various measures, including orders to close non-essential businesses and personal and commercial travel restrictions. Operations at our facilities complied with government ordered shutdowns and reopening plans. The COVID-19 pandemic continues to be an evolving situation. We continue to monitor changes in the various locations in which we operate and adapt our protocols accordingly as well as on a proactive basis wherever possible.

Impact on Our Financial Statements and Business Operations

The COVID-19 pandemic has resulted in economic disruption. The Company's financial results for the year ended December 31, 2020 were significantly impacted by the COVID-19 pandemic. In the latter half of March 2020 and throughout the remainder of the year, we were measurably impacted by an overall slowdown in economic activity which included temporary closures at some of our customer sites and rising general uncertainty about future economic activity. As we began to see the increased levels of operations at our customers during the third and fourth quarters of 2020, our financial results, including direct revenues and Adjusted EBITDA, improved for both segments when compared to the second quarter of 2020.

In our Environmental Services segment, lower activity levels during 2020 and shutdowns of customers' operations decreased the level of our services that were required and the quantities of commercial and industrial waste disposed of throughout our network of facilities. Lower demand for oil and overall price declines in the global oil market, resulting from COVID-19, negatively impacted the level of environmental services we provided to our customers in that market.

We continue to see significant demand for disinfecting, decontamination and disposal related emergency response services specifically in response to COVID-19. The Company completed nearly 14,000 projects responding specifically to the risk of COVID-19, amounting to $120.4 million of direct revenues during the year ended December 31, 2020. Although uncertain as to the prevalence of such services in 2021, we do expect demand for these COVID-19 response services to continue. The increased level of this emergency response work, however, did not overcome the decline in Company revenues lost due to the impacts of the COVID-19 pandemic.

We expect that the services provided by our Safety-Kleen segment will continue to be impacted by less automotive related travel and any temporary customer shutdowns reducing demand for Safety-Kleen core services and products. We have observed declining demand in the primary sectors impacting this business including the overall automotive sector, as consumer activity lags historical levels across the United States and Canada. Lower oil related demand and price declines in the global oil market, exacerbated by COVID-19 impacts, reduced revenues generated by the business in 2020. In response to the impact on the Safety-Kleen business and in particular the reduced availability of used motor oils which are utilized as feedstock in our re-refining processes and reduced demand for base and blended oil products, we temporarily shuttered nearly half of the total production capacity of our oil re-refineries in April 2020. However, by the end of 2020, our re-refinery production capacity has returned to mid-2019 levels.

The Company considered the impact of COVID-19 on the assumptions and estimates used in the preparation of the financial statements and did not identify any significant changes in estimates. Specifically, management concluded that there had not been any triggering events requiring further assessment of asset impairments and that our goodwill and indefinite lived intangible assets were valued appropriately based on our annual evaluation as of December 31, 2020. Management also assessed the extent to which the current macroeconomic events brought about by COVID-19 and significant declines in oil demand may have impacted the valuation of expected credit losses on accounts receivable and certain inventory items or resulted in modifications to any significant contracts. Ultimately the results of these assessments did not have a material impact on the Company's estimates as of December 31, 2020.

Impact of Government Programs

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law in response to the widespread economic impact of the COVID-19 pandemic. On April 11, 2020, the Canadian federal government enacted the COVID-19 Emergency Response Act, No.2, which implemented the Canada Emergency Wage Subsidy ("CEWS"). Since the establishment of these programs, management has considered and analyzed the Company's eligibility under such government programs. Most significantly, the Company applied for certain employee retention credits under the CARES Act and the wage subsidy under the CEWS. Although the Company did implement certain cost reduction plans associated with labor in the second quarter of 2020, these government programs allowed our workforce to remain stable during the temporary slowdown in activity. The table below summarizes the benefit of these government programs recorded in the statement of operations for the year ended December 31, 2020 (in thousands):

	For the year ended December 31, 2020			
	Environmental Services	Safety-Kleen	Corporate Items	Total
Cost of revenues	$ 20,827	$ 7,665	$ 611	$ 29,103
Selling, general and administrative expenses	6,276	4,534	2,370	13,180
Total	$ 27,103	$ 12,199	$ 2,981	$ 42,283

In addition to the credits and subsidies outlined above, which do not require any repayment to be made by the Company, the CARES Act also allows for the deferral of payment related to certain payroll taxes. In total, we deferred the remittance of the employer portion of federal payroll tax withholdings of $35.4 million during the year ended December 31, 2020, which will be required to be paid in two equal installments in the fourth quarters of 2021 and 2022.

Highlights

Total direct revenues for 2020 decreased 7.9% to $3.1 billion, compared with $3.4 billion in 2019. Our Environmental Services segment direct revenues decreased $99.8 million in 2020 compared with 2019 primarily due to lower demand for our industrial and technical related services. Lower overall economic activity due to the COVID-19 pandemic most notably reduced the demand for industrial turnaround, environmental remediation and waste disposal projects. This decrease was partially offset by increased emergency response decontamination services in the wake of the COVID-19 pandemic. Direct revenues recorded by Safety-Kleen decreased $167.9 million in 2020 compared to 2019, predominately due to lower demand across the Safety-Kleen portfolio of products and core services also resulting from overall lower economic activity, customer shutdowns as well as lower oil demand and pricing driven by the COVID-19 pandemic. Increased direct revenues from used motor oil collection partially offset these decreases in the Safety-Kleen segment. Foreign currency translation of our Canadian operations negatively impacted our consolidated direct revenues by $3.8 million in 2020 as compared to 2019.

Income from operations in 2020 was $251.3 million, compared with $229.5 million in 2019. We reported net income in 2020 and 2019 of $134.8 million and $97.7 million, respectively. Adjusted EBITDA, which is the primary financial measure by which our segments are evaluated, increased 2.8% to $555.3 million in 2020 from $540.3 million in 2019. Our relatively consistent levels of Adjusted EBITDA in 2020, despite the notable decline in direct revenues, can be attributed to cost reduction strategies put in place by the Company, improved mix of revenue generating services and benefits received from the government programs discussed above. Additional information regarding Adjusted EBITDA, which is a non-GAAP measure, including a reconciliation of Adjusted EBITDA to net income, appears below under *"Adjusted EBITDA."*

Net cash from operating activities for 2020 was $430.6 million, an increase of $17.4 million from 2019. Adjusted free cash flow, which management uses to measure our financial strength and ability to generate cash, was $265.0 million in 2020, which represented a $56.5 million increase over 2019 primarily due to higher earnings, lower capital expenditures, and benefits received from the government programs discussed above. Additional information regarding adjusted free cash flow, which is a non-GAAP measure, including a reconciliation of adjusted free cash flow to net cash from operating activities, appears below under "*Adjusted Free Cash Flow*."

Segment Performance

The primary financial measure by which we evaluate the performance of our segments is Adjusted EBITDA. The following table sets forth certain financial information associated with our results of operations for the years ended December 31, 2020, 2019 and 2018 (in thousands, except percentages):

	Summary of Operations						
	For the years ended December 31,			2020 over 2019		2019 over 2018	
	2020	2019	2018	$ Change	% Change	$ Change	% Change
Direct Revenues[1]:							
Environmental Services	$ 2,137,306	$ 2,237,068	$ 2,141,194	$ (99,762)	(4.5)%	$ 95,874	4.5%
Safety-Kleen	1,010,202	1,178,129	1,161,282	(167,927)	(14.3)	16,847	1.5
Corporate Items	(3,411)	(3,007)	(2,173)	(404)	N/M	(834)	N/M
Total	3,144,097	3,412,190	3,300,303	(268,093)	(7.9)	111,887	3.4
Cost of Revenues[2]:							
Environmental Services	1,459,572	1,620,038	1,576,705	(160,466)	(9.9)	43,333	2.7
Safety-Kleen	658,116	749,407	725,734	(91,291)	(12.2)	23,673	3.3
Corporate Items	20,063	18,374	3,112	1,689	N/M	15,262	N/M
Total	2,137,751	2,387,819	2,305,551	(250,068)	(10.5)	82,268	3.6
Selling, General and Administrative Expenses:							
Environmental Services	157,774	170,746	183,633	(12,972)	(7.6)	(12,887)	(7.0)
Safety-Kleen	122,914	146,344	153,519	(23,430)	(16.0)	(7,175)	(4.7)
Corporate Items	170,356	166,964	166,595	3,392	2.0	369	0.2
Total	451,044	484,054	503,747	(33,010)	(6.8)	(19,693)	(3.9)
Adjusted EBITDA:							
Environmental Services	519,960	446,284	380,856	73,676	16.5	65,428	17.2
Safety-Kleen	229,172	282,378	282,029	(53,206)	(18.8)	349	0.1
Corporate Items	(193,830)	(188,345)	(171,880)	(5,485)	(2.9)	(16,465)	(9.6)
Total	$ 555,302	$ 540,317	$ 491,005	$ 14,985	2.8%	$ 49,312	10.0%

N/M = not meaningful

(1) Direct revenue is revenue allocated to the segment performing the provided service.

(2) Cost of revenue is shown exclusive of items presented separately on the consolidated statements of operations, which consist of (i) accretion of environmental liabilities and (ii) depreciation and amortization.

Direct Revenues

There are many factors which have impacted and continue to impact our revenues, including a significant impact on our revenue resulting from COVID-19 as discussed in *Impacts of COVID-19* above. Other factors include, but are not limited to: overall industrial activity and growth in North America, existence or non-existence of large scale environmental waste and remediation projects, competitive industry pricing, miles driven and related lubricant demand, impacts of acquisitions and divestitures, the level of emergency response projects, base and blended oil demand and pricing, market changes relative to the collection of used oil, the number of parts washers placed at customer sites and foreign currency translation. In addition, customer efforts to minimalize hazardous waste and changes in regulation can also impact our revenues.

Environmental Services

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Direct revenues	$ 2,137,306	$ 2,237,068	$ 2,141,194	$ (99,762)	(4.5)%	$ 95,874	4.5 %

Environmental Services direct revenues for the year ended December 31, 2020 decreased $99.8 million from the comparable period in 2019 driven primarily by lower demand for our industrial and technical related services, partially offset by COVID-19 emergency response decontamination services. Lower economic activity throughout the COVID-19 pandemic reduced the demand for industrial and technical related services as customers postponed and/or reduced the levels of industrial turnarounds, environmental remediation projects and other waste disposal services. In addition, direct revenues at our landfill facilities decreased $4.4 million when compared with the same period in the prior year due to lower volumes of waste streams, partially offset by pricing increases.

In the year ended December 31, 2020, the Company generated $120.4 million of direct revenues from COVID-19 related emergency response decontamination services, which partially offset the above direct revenue decreases. Additionally, direct revenues at our incinerator facilities increased by $29.1 million when compared to 2019 due to disposal of higher value waste streams. Utilization at our incinerator facilities remained relatively consistent with the prior year at 84%. Also impacting the year over year change in direct revenues within this segment was the negative impact of foreign currency translation on our Canadian operations of $3.1 million.

Environmental Services direct revenues for the year ended December 31, 2019 increased $95.9 million from the comparable period in 2018. Greater levels of activity at our sales and service branches and improved average pricing for disposal of waste streams at our incinerators drove this increase in 2019. Service related revenues increased, in part, due to $15.1 million of emergency response work associated with Field and Emergency Response revenue streams during 2019, compared to $9.8 million during 2018. Despite a higher number of down days at our Deer Park facility in Q1 2019 as a result of a fire at a neighboring facility, utilization at our incinerator facilities in 2019 remained relatively consistent with the prior year at approximately 85%. A mix of higher priced waste streams resulted in an increase in direct revenues from our incinerator facilities year over year. Average price per ton increased approximately 11% from the prior year resulting in a $35.1 million increase in direct revenues in 2019. These increases were partially offset by a decrease in Industrial Services revenue as we continue to focus on selecting higher margin turnaround projects. Also impacting the year over year change in direct revenues within this segment was the negative impact of foreign currency translation on our Canadian operations of $9.3 million.

Safety-Kleen

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Direct revenues	$ 1,010,202	$ 1,178,129	$ 1,161,282	$ (167,927)	(14.3)%	$ 16,847	1.5 %

Safety-Kleen direct revenues for the year ended December 31, 2020 decreased $167.9 million from the comparable period in 2019. Customer shut downs and overall lower automotive travel in response to the COVID-19 pandemic reduced the demand for oil related products and core services provided by the Safety-Kleen business in 2020. Base oil direct revenues decreased $69.2 million from the comparable period in 2019 due to lower volumes, and to a lesser extent lower prices. Lower volumes also drove a $43.1 million decrease in blended oil direct revenues in 2020. Decreased demand for Safety-Kleen's core service offerings contributed to the decline in direct revenues as containerized waste and vacuum services revenue decreased $44.6 million from the comparable period in 2019. Recycled fuel oil and refinery byproducts revenue decreased $36.4 million, driven by lower volumes and pricing, and lower demand for parts washer services contributed $19.0 million to the overall revenue decrease. Partially offsetting these decreases was a $41.1 million increase in direct revenue from used motor oil collections due to pricing increases on these services despite lower collection volumes. The impact of foreign currency translation on our Safety-Kleen Canadian operations was minimal. Slow incremental improvements in the demand for the segment's core service offerings are expected to continue as national and state vaccination plans prove successful.

Safety-Kleen direct revenues for the year ended December 31, 2019 increased $16.8 million from the comparable period in 2018 primarily due to growth in the business’ core service offerings and increased blended oil volumes. Revenues generated through our core service offerings, such as handling of containerized waste and vacuum services, accounted for $22.3 million of incremental revenues driven both by volume and pricing increases. Higher volumes of blended oil sales and increased pricing of our used motor oil collections contributed $15.6 million and $5.2 million, respectively, to the growth in direct revenues from the comparable period in 2018. Revenue from contract blending and packaging also increased $9.3 million due to increased volume. These increases were partially offset by a $17.5 million decrease in base oil sales due to reductions in pricing experienced in 2019 in response to lower demand across the base oil market and lower base oil volumes, most significantly seen in the first quarter of 2019. Sales of recycled fuel oil and refinery byproducts decreased by $12.3 million from prior year due to a reduction in volume. In 2019, parts washer services were relatively consistent with the prior year. Also included in the change within this segment was the negative impact of foreign currency translation on our Canadian operations of $3.4 million.

Cost of Revenues

We believe that our ability to manage operating costs is important to our ability to remain price competitive. We continue to upgrade the quality and efficiency of our services through the development of new technology and continued modifications at our facilities, invest in new business opportunities and aggressively implement strategic sourcing and logistics solutions as well as other cost reduction initiatives while also continuing to optimize our management and operating structure in an effort to maintain and increase operating margins.

Environmental Services

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Cost of revenues	$ 1,459,572	$1,620,038	$1,576,705	$ (160,466)	(9.9)%	$ 43,333	2.7 %
As a % of Direct revenues	68.3 %	72.4 %	73.6 %	(4.1)%		(1.2)%	

Environmental Services cost of revenues for the year ended December 31, 2020 decreased $160.5 million from the comparable period in 2019. The overall reduction in costs was comprised of a $64.5 million decrease to labor and benefits related costs, including travel costs, a $50.8 million decrease to external transportation, disposal and fuel costs and a $43.9 million decrease to equipment and supply costs. These decreases were mainly attributable to lower direct revenues and successful cost control initiatives, as well as a $20.8 million benefit from the employee retention credits and subsidies recorded in 2020 under the CARES Act and CEWS which is reflected in the reduction to labor and benefit related costs above. Absent the benefit of these government programs, cost of revenues as a percentage of direct revenues still improved 3.2% primarily due to a favorable mix of revenues and certain cost reduction strategies which provided better leverage of our employee and asset bases and drove lower external transportation, equipment rental and subcontractor spending.

Environmental Services cost of revenues increased $43.3 million for the year ended December 31, 2019, although these costs decreased as a percentage of direct revenue due to a mix of higher priced waste streams in our incineration network, which increased profitability, and the results of ongoing cost reduction projects, including site consolidations. The overall cost increase was due to compensation and benefits related costs, equipment and supply costs and transportation, outside disposal and fuel costs which increased $20.4 million, $11.4 million and $3.9 million, respectively. The incremental operating costs were commensurate with greater activity levels in 2019.

Safety-Kleen

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Cost of revenues	$ 658,116	$ 749,407	$ 725,734	$ (91,291)	(12.2)%	$ 23,673	3.3 %
As a % of Direct revenues	65.1 %	63.6 %	62.5 %	1.5 %		1.1 %	

Safety-Kleen cost of revenues for the year ended December 31, 2020 decreased $91.3 million from the comparable period in 2019. The overall reduction in costs was comprised of a $37.7 million decrease in costs of oil additives and other raw materials, a $23.2 million decrease in labor and benefits related costs, including travel costs and a $21.7 million decrease in transportation, disposal and fuel costs. These decreases were mainly attributable to lower direct revenues and cost reduction strategies, as well as a $7.7 million benefit related to employee retention credits and subsidies recorded in 2020 under the CARES Act and CEWS which is reflected in the decrease in labor and benefits related costs above. Absent the benefit of these government programs, costs of revenues as a percentage of direct revenues increased 2.3%. This increase resulted from certain labor and benefits related costs and operating costs which were not reduced proportionate to the overall lower business activity, including the costs incurred while temporarily shuttering certain re-refineries. These costs were partially offset by reductions in transportation costs and other cost reduction strategies.

Safety-Kleen cost of revenues for the year ended December 31, 2019 increased $23.7 million from the comparable period in 2018. As a percentage of direct revenues, these costs increased as well mainly due to lower average pricing on the oil products sold leading to reduced leverage of our fixed cost base. Increased logistics costs, largely due to weather at the beginning of the year, also negatively impacted costs as a percentage of direct revenues. The overall cost increase was due to higher labor and benefits related costs of $8.5 million, raw material costs associated with blended oil products of $5.5 million and transportation, disposal and fuel costs of $2.7 million. These increases were in line with the overall growth of our core service offerings and blended oil sales.

Selling, General and Administrative Expenses

We strive to manage our selling, general and administrative ("SG&A") expenses commensurate with the overall performance of our segments and corresponding revenue levels. We believe that our ability to properly align these costs with business performance is reflective of our strong management of the businesses and further promotes our ability to remain competitive in the marketplace.

Environmental Services

(in thousands, except percentages)	For the years ended December 31, 2020	2019	2018	2020 over 2019 Change	% Change	2019 over 2018 Change	% Change
SG&A expenses	$ 157,774	$ 170,746	$ 183,633	$ (12,972)	(7.6)%	$ (12,887)	(7.0)%
As a % of Direct revenues	7.4 %	7.6 %	8.6 %	(0.2)%		(1.0)%	

Environmental Services SG&A expenses for the year ended December 31, 2020 decreased $13.0 million from the comparable period in 2019 primarily due to lower direct revenues and therefore lower costs, such as travel and other selling related costs, as well as a $6.3 million benefit in labor and benefits related costs related to the employee retention credits and subsidies recorded in 2020 under the CARES Act and CEWS. Partially offsetting these year over year reductions was a $5.5 million favorable resolution of a litigation matter and recovery of certain trade receivables of $5.4 million, both of which were recorded in the first quarter of 2019 and favorably impacted the SG&A expenses for the year ended December 31, 2019. Absent the impacts from the 2020 employee retention credits and 2019 litigation and receivable matters, Environmental Services SG&A expenses as a percentage of direct revenues remained relatively consistent with the comparable period in 2019.

Environmental Services SG&A expenses for the year ended December 31, 2019 decreased $12.9 million from the comparable period in 2018 and SG&A as a percentage of direct revenue decreased as well. The primary driver of these decreases related to certain trade receivables which were reserved for in 2018 and subsequently recovered in 2019, generating a favorable difference of nearly $13.0 million. The favorable resolution of a litigation matter further reduced SG&A expenses by $5.5 million in 2019. These decreases were partially offset by a $5.2 million increase in compensation and benefits related costs which was consistent with the growth of the business in 2019. Excluding the recovery of trade receivables and litigation impacts, 2019 SG&A expenses as a percentage of direct revenues still improved over the prior year.

Safety-Kleen

(in thousands, except percentages)	For the years ended December 31, 2020	2019	2018	2020 over 2019 Change	% Change	2019 over 2018 Change	% Change
SG&A expenses	$ 122,914	$ 146,344	$ 153,519	$ (23,430)	(16.0)%	$ (7,175)	(4.7)%
As a % of Direct revenues	12.2 %	12.4 %	13.2 %	(0.2)%		(0.8)%	

Safety-Kleen SG&A expenses for the year ended December 31, 2020 decreased $23.4 million from the comparable period in 2019. These decreases were primarily attributable to lower direct revenues and therefore lower sales related costs, as well as a reduction in labor and benefit related costs of $4.5 million for the year ended December 31, 2020 attributable to employee retention credits and subsidies under the CARES Act and CEWS. Absent the benefit of these government programs, Safety-Kleen 2020 SG&A expenses as a percentage of direct revenues remained relatively consistent with the comparable period in the prior year.

Safety-Kleen SG&A expenses for the year ended December 31, 2019 decreased $7.2 million from the comparable period in 2018 and SG&A as a percentage of direct revenues decreased as well. The primary driver of these decreases is a $4.4 million decrease in compensation and benefits related costs resulting from lower headcount and cost saving initiatives implemented by the business throughout 2019. A reduction in legal related costs of $1.6 million also contributed to the overall decrease in SG&A expenses.

Corporate Items

(in thousands, except percentages)	For the years ended December 31, 2020	2019	2018	2020 over 2019 Change	% Change	2019 over 2018 Change	% Change
SG&A expenses	$ 170,356	$ 166,964	$ 166,595	$ 3,392	2.0 %	$ 369	0.2 %

Corporate Items SG&A expenses for the year ended December 31, 2020 increased by $3.4 million when compared to 2019 primarily due to increased marketing expenses of $3.8 million to expand brand awareness, increased investment in our technology infrastructure of $3.8 million and a $3.3 million change in an environmental remedial liability estimate for an inactive site. These costs were partially offset by a $4.1 million decrease in travel and real estate related expenses and a $2.4 million reduction in labor costs for the employee retention credit and subsidies recorded under the CARES Act and CEWS.

Corporate Items SG&A expenses for the year ended December 31, 2019 were consistent with the comparable period in 2019. Continued investment in our employees increased our compensation and benefits related costs by $6.6 million and stock-based compensation increased by $1.0 million due to the achievement of certain performance metrics associated with performance based awards. These costs were offset by a $6.9 million reduction in legal and consulting fees due to cost saving initiatives.

Adjusted EBITDA

Management considers Adjusted EBITDA to be a measurement of performance which provides useful information to both management and investors. Adjusted EBITDA should not be considered an alternative to net income or other measurements under generally accepted accounting principles ("GAAP"). Adjusted EBITDA is not calculated identically by all companies and, therefore our measurements of Adjusted EBITDA, while defined consistently and in accordance with our existing credit agreement, may not be comparable to similarly titled measures reported by other companies.

We use Adjusted EBITDA to enhance our understanding of our operating performance, which represents our views concerning our performance in the ordinary, ongoing and customary course of our operations. We historically have found it helpful, and believe that investors have found it helpful, to consider an operating measure that excludes certain expenses relating to transactions not reflective of our core operations.

The information about our operating performance provided by this financial measure is used by our management for a variety of purposes. We regularly communicate Adjusted EBITDA results to our lenders since our loan covenants are based upon levels of Adjusted EBITDA achieved and to our board of directors and we discuss with the board our interpretation of such results. We also compare our Adjusted EBITDA performance against internal targets as a key factor in determining cash and equity bonus compensation for executives and other employees, largely because we believe that this measure is indicative of how the fundamental business is performing and is being managed. We also utilize this measure when benchmarking our Company against our nearest competitors.

We also provide information relating to our Adjusted EBITDA so that analysts, investors and other interested persons have the same data that we use to assess our core operating performance. We believe that Adjusted EBITDA should be viewed only as a supplement to the GAAP financial information. We also believe, however, that providing this information in addition to, and together with, GAAP financial information provides a better understanding of our core operating performance and how management evaluates and measures our performance.

The following is a reconciliation of net income to Adjusted EBITDA for the following years (in thousands, except percentages):

	For the years ended December 31,		
	2020	**2019**	**2018**
Net income	$ 134,837	$ 97,740	$ 65,636
Accretion of environmental liabilities	11,051	10,136	9,806
Depreciation and amortization	292,915	300,725	298,625
Other expense (income), net	290	(2,897)	4,510
Loss on early extinguishment of debt	—	6,131	2,488
Loss (gain) on sale of businesses	3,376	(687)	—
Interest expense, net of interest income	73,120	78,670	81,094
Provision for income taxes	39,713	50,499	28,846
Adjusted EBITDA	$ 555,302	$ 540,317	$ 491,005
As a % of Direct revenues	17.7 %	15.8 %	14.9 %

Beginning in the first quarter of 2021, we expect to revise our calculation of reported Adjusted EBITDA to add stock-based compensation, a non-cash item, to other charges which are added back to GAAP net income for purposes of calculating Adjusted EBITDA. We are making this change in order to be more consistent with how certain of our peer group companies report their non-GAAP results, to align with how management will evaluate the operating performance of the Company and performance metrics for certain incentive compensation awards expected to be issued in 2021 and beyond, and to be consistent with the definition of "Adjusted EBITDA" now used for covenant compliance purposes in our outstanding financing agreements as amended to date. The amount added back each period is expected to match the line item for stock-based compensation as recorded on the Company's GAAP consolidated statements of cash flows. In the future, when we report our results, all relevant prior period Adjusted EBITDA amounts will be recast to provide comparative information.

Depreciation and Amortization

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Depreciation of fixed assets and amortization of landfills and finance leases	$ 257,131	$ 265,531	$ 264,254	$ (8,400)	(3.2)%	$ 1,277	0.5 %
Permits and other intangibles amortization	35,784	35,194	34,371	590	1.7 %	823	2.4 %
Total depreciation and amortization	$ 292,915	$ 300,725	$ 298,625	$ (7,810)	(2.6)%	$ 2,100	0.7 %

Depreciation and amortization for the year ended December 31, 2020 decreased from the comparable period in 2019 due to certain assets becoming fully depreciated, slightly offset by an increase in amortization of finance lease right-of-use assets. Depreciation and amortization for the year ended December 31, 2019 remained relatively consistent with the comparable period in 2018.

Other (Expense) Income, net

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Other (expense) income, net	$ (290)	$ 2,897	$ (4,510)	$ (3,187)	(110.0)%	$ 7,407	(164.2)%

For the year ended December 31, 2020, other (expense) income, net decreased $3.2 million from the comparable period in 2019 primarily due to insurance proceeds received in 2019 which did not recur in 2020. Other (expense) income, net increased $7.4 million from 2018 to 2019 primarily due to insurance proceeds received in 2019 and smaller comparative losses recognized on sales or disposals of fixed assets.

Loss on Early Extinguishment of Debt

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Loss on early extinguishment of debt	$ —	$ (6,131)	$ (2,488)	$ 6,131	(100.0)%	$ (3,643)	146.4 %

During the year ended December 31, 2020, we did not record a loss on early extinguishment of debt. During the year ended December 31, 2019, we recorded a $6.1 million loss on early extinguishment of debt in connection with the extinguishment of $845.0 million of unsecured senior notes due in 2021 which were repaid during 2019. During the year ended December 31, 2018, we recorded a $2.5 million loss on early extinguishment of debt in connection with the extinguishment of the $400.0 million of previously outstanding senior unsecured notes. The losses recognized in each of these years consisted of amounts paid in excess of par in order to extinguish the debt prior to maturity and non-cash expenses related to the write-off of unamortized financing costs. For additional information regarding our financing arrangements, see Note 11, "Financing Arrangements," under Item 8, "Financial Statements and Supplementary Data," of this report.

(Loss) Gain on Sale of Businesses

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
(Loss) gain on sale of businesses	$ (3,376)	$ 687	$ —	$ (4,063)	N/M	$ 687	N/M

During the year ended December 31, 2020, we recorded a $3.4 million loss on the sale of non-core businesses within our Environmental Services segment. During the year ended December 31, 2019, we recorded a $0.7 million gain on the sale of a non-core business within our Environmental Services segment.

Provision for Income Taxes

	For the years ended December 31,			2020 over 2019		2019 over 2018	
(in thousands, except percentages)	2020	2019	2018	Change	% Change	Change	% Change
Provision for income taxes	$ 39,713	$ 50,499	$ 28,846	$ (10,786)	(21.4)%	$ 21,653	75.1%

For the year ended December 31, 2020, the provision for income taxes decreased $10.8 million from the comparable period in 2019, despite an increase in income before provision for income taxes, largely due to the release of a valuation allowance on certain companies in Canada and amended federal and state returns filed. The effective tax rate for 2020 was 22.8% as compared to 34.1% in the prior year.

For the year ended December 31, 2019, provision for income taxes increased $21.7 million from the comparable period in 2018, due to higher earnings in the United States and the impact from a nonrecurring $9.8 million benefit recognized in 2018 related to the filing of then current and amended prior year tax returns. The effective tax rate for 2019 was 34.1% as compared to 30.5% in 2018.

Liquidity and Capital Resources

	For the years ended December 31,		
(in thousands)	2020	2019	2018
Net cash from operating activities	$ 430,597	$ 413,192	$ 373,210
Net cash used in investing activities	(199,460)	(217,856)	(349,659)
Net cash used in financing activities	(88,946)	(53,425)	(110,997)

Net cash from operating activities

Net cash from operating activities for the year ended December 31, 2020 was $430.6 million, an increase of $17.4 million compared to the year ended December 31, 2019. The increase was most notably impacted by increased income levels and deferring the payment of certain employer payroll taxes amounting to $35.4 million as allowed for under the CARES Act, partially offset by a $26.1 million increase in income taxes paid, net of refunds.

Net cash from operating activities for the year ended December 31, 2019 was $413.2 million, an increase of $40.0 million compared to the year ended December 31, 2018. The increase was most directly attributable to greater levels of operating income and lower working capital, partially offset by an increase in environmental spending. The reduction in working capital was primarily attributable to the timing of interest payments associated with the debt refinancing completed in the third quarter of 2019. Refinancing this debt changed the timing of our related interest payments from June and December to January and July.

Net cash used in investing activities

Net cash used in investing activities for the year ended December 31, 2020 was $199.5 million, a decrease of $18.4 million compared to the year ended December 31, 2019, most notably due to decreases in cash paid for acquisitions and additions to property, plant and equipment. These overall cash decreases were partially offset by an increase in net purchases of marketable securities. Current year cash paid for additions to property, plant and equipment included the $21.1 million purchase and capital improvements of our corporate headquarters.

Net cash used in investing activities for the year ended December 31, 2019 was $217.9 million, a decrease of $131.8 million compared to the year ended December 31, 2018. This decrease was due to less cash used to fund acquisitions in 2019 and an increase in net proceeds from sales of marketable securities, partially offset by $26.8 million of increased capital expenditure levels, net of proceeds, primarily due to 2019 investments in facility upgrades and landfill spending.

Net cash used in financing activities

Net cash used in financing activities for the year ended December 31, 2020 was $88.9 million, an increase of $35.5 million compared to the year ended December 31, 2019. The increase was primarily driven by a $53.4 million increase in cash paid to repurchase common stock, partially offset by a $9.1 million change related to uncashed checks and a $7.9 million reduction in deferred financing costs paid.

Net cash used in financing activities for the year ended December 31, 2019 was $53.4 million, a decrease of $57.6 million compared to the year ended December 31, 2018. The decrease was primarily driven by a $50.0 million reduction in net principal payments on debt obligations in 2019 and a $23.7 million decrease in repurchases of common stock, partially offset by increased outflows for deferred financing costs associated with debt refinancing activities in 2019 of $6.1 million, tax payments related to withholdings on vested restricted stock of $4.2 million and changes in uncashed checks of $3.8 million.

Adjusted Free Cash Flow

Management considers adjusted free cash flow to be a measure of liquidity which provides useful information to both management, creditors and investors about our financial strength and our ability to generate cash. Additionally, adjusted free cash flow is a metric on which a portion of management incentive compensation is based. We define adjusted free cash flow as net cash from operating activities excluding cash impacts of items derived from non-operating activities, such as taxes paid in connection with divestitures, less additions to property, plant and equipment plus proceeds from sales or disposals of fixed assets. Adjusted free cash flow should not be considered an alternative to net cash from operating activities or other measurements under GAAP. Adjusted free cash flow is not calculated identically by all companies, and therefore our measurements of adjusted free cash flow may not be comparable to similarly titled measures reported by other companies.

The following is a reconciliation from net cash from operating activities to adjusted free cash flow for the following periods (in thousands):

	For the years ended December 31,		
	2020	2019	2018
Net cash from operating activities	$ 430,597	$ 413,192	$ 373,210
Additions to property, plant and equipment	(196,256)	(216,324)	(193,344)
Purchase and capital improvements of corporate headquarters	21,080	—	—
Proceeds from sale and disposal of fixed assets	9,623	11,655	15,445
Adjusted free cash flow	$ 265,044	$ 208,523	$ 195,311

Summary of Capital Resources

At December 31, 2020, cash and cash equivalents and marketable securities totaled $571.0 million, compared to $414.4 million at December 31, 2019. At December 31, 2020, cash and cash equivalents held by our Canadian subsidiaries totaled $143.7 million. At December 31, 2020, the cash and cash equivalents and marketable securities balance for our U.S. operations was $427.2 million, and our U.S. operations had net operating cash flows of $341.3 million for the year ended December 31, 2020. Additionally, we have a $400.0 million revolving credit facility, of which approximately $264.0 million was available to borrow at December 31, 2020. Based on the above and our current plans, we believe that our operations have adequate financial resources to satisfy their current liquidity needs.

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing, and financing activities. Our primary ongoing cash requirements will be to fund operations, capital expenditures, interest payments and investments in line with our business strategy. We believe our future operating cash flows will be sufficient to meet our future operating and internal investing cash needs. Furthermore, our existing cash balance and the availability of additional borrowings under our revolving credit facility provide additional potential sources of liquidity should they be required.

Financing Arrangements

Terms of our $545.0 million of 4.875% senior unsecured notes due 2027, $300.0 million of 5.125% senior unsecured notes due 2029 and $727.2 million senior secured notes due 2024 which were outstanding at December 31, 2020, and our $400.0 million revolving credit facility, are discussed further in Note 11, “Financing Arrangements,” to our consolidated financial statements included in Item 8 of this report. We continue to monitor our debt instruments and evaluate opportunities where it may be beneficial to refinance or reallocate the portfolio.

As of December 31, 2020, we were in compliance with the covenants of all of our debt agreements, and we believe we will continue to meet such covenants.

Environmental Liabilities

	As of December 31,		2020 over 2019	
(in thousands)	2020	2019	Change	% Change
Closure and post-closure liabilities	$ 87,926	$ 75,651	$ 12,275	16.2 %
Remedial liabilities	114,813	114,173	640	0.6 %
Total environmental liabilities	$ 202,739	$ 189,824	$ 12,915	6.8 %

Total environmental liabilities as of December 31, 2020 were $202.7 million, an increase of $12.9 million compared to December 31, 2019. This increase was primarily due to annual accretion of $11.1 million and changes in environmental liability estimates resulting in charges to the consolidated statement of income of $10.7 million, partially offset by expenditures of $12.4 million made during 2020.

We anticipate our environmental liabilities, substantially all of which we assumed in connection with our acquisitions, will be payable over many years and that cash flow from operations will generally be sufficient to fund the payment of such liabilities when required. However, events not anticipated (such as future changes in environmental laws and regulations) could require that such payments be made earlier or in greater amounts than currently anticipated, which could adversely affect our results of operations, cash flow and financial condition. Conversely, the development of new treatment technologies or other circumstances may arise in the future which may reduce amounts ultimately paid.

Contractual Obligations

The following table has been included to assist in understanding our debt and similar obligations as of December 31, 2020 and our ability to meet such contractual obligations (in thousands):

		Payments due in			
	Total	**Less than 1 year**	**1-3 years**	**4-5 years**	**After 5 years**
Closure, post-closure and remedial liabilities[1]	$ 455,838	$ 27,659	$ 54,692	$ 28,095	$ 345,392
Current and long-term debt, at par	1,572,161	7,535	15,070	704,556	845,000
Interest on current and long-term debt [2]	384,930	65,389	130,349	95,414	93,778
Operating leases	172,768	45,341	66,643	35,720	25,064
Finance leases	73,113	8,407	17,253	15,821	31,632
Total contractual obligations	$ 2,658,810	$ 154,331	$ 284,007	$ 879,606	$ 1,340,866

(1) The undiscounted value of closure, post-closure and remedial liabilities of $455.8 million is equivalent to a present value of $202.7 million based on discounting of $179.3 million and the undiscounted remainder of $73.8 million to be accrued for closure and post-closure liabilities over the remaining site lives.

(2) Interest on our variable-rate $727.2 million senior secured term loans was calculated based on the effective interest rate of that debt as of December 31, 2020. Our interest rate swap agreements effectively fix the interest rate on $350.0 million of that variable rate debt at an annual rate of approximately 4.67%, while the remaining balance pays interest based upon LIBOR and an applicable margin. The assumed rate reflected in the table above for this variable rate debt after considering the swap agreements is 3.23%.

Off-Balance Sheet Arrangements

We obtain standby letters of credit as security for financial assurances we have been required to provide to regulatory bodies for our hazardous waste facilities and which would be called only in the event that we fail to satisfy closure, post-closure and other obligations under the permits issued by those regulatory bodies for such licensed facilities. As of December 31, 2020, there were $120.6 million outstanding letters of credit. See Note 11, "Financing Arrangements," to our consolidated financial statements included in Item 8 of this report for further discussion of our standby letters of credit and other financing arrangements.

Except for our obligations under letters of credit described above and performance obligations incurred in the ordinary course of business, we are not party to any off-balance sheet arrangements involving guarantee, contingency or similar obligations to entities whose financial statements are not consolidated with our results, and that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that would be material to investors in our securities.

Capital Expenditures

In 2020, our capital expenditures, net of disposals, were $186.6 million. We anticipate that 2021 capital spending, net of disposals, will be in the range of $185.0 million to $205.0 million. Unanticipated changes in environmental regulations could require us to make significant capital expenditures for our facilities and adversely affect our results of operations and cash flow.

Critical Accounting Policies and Estimates

The preparation of our financial statements requires us to make estimates and judgments that affect the reported amounts of our assets, liabilities, revenues and expenses and related disclosures of contingent liabilities. Our significant accounting policies are discussed in Note 2, "Significant Accounting Policies," to our consolidated financial statements included in Item 8 of this report. We believe that, of our significant accounting policies, the following contain estimates that involve a higher degree of complexity in their application: accounting for landfills, non-landfill closure and post-closure liabilities, remedial liabilities, goodwill, permits and other intangible assets and legal matters. Our management reviews critical accounting estimates with the Audit Committee of our Board of Directors on an ongoing basis and as needed prior to the release of our annual financial statements.

Landfill Accounting. We amortize landfill improvements and certain landfill-related permits over their estimated useful lives. The units-of-consumption method is used to amortize land, landfill cell construction, asset retirement costs and remaining landfill cells and sites. We also utilize the units-of-consumption method to record closure and post-closure obligations for landfill cells and sites. Under the units-of-consumption method, we include future estimated construction and asset retirement costs, as well as costs incurred to date, in the amortization base of the landfill assets. Additionally, where appropriate, as discussed below, we include probable expansion airspace yet to be permitted in the calculation of the total remaining useful life of the landfill. If we determine that expansion capacity should no longer be considered in calculating the recoverability of a landfill asset, we may be required to recognize an asset impairment or incur significantly higher amortization expense. If at any time we decide to abandon the expansion effort, the capitalized costs related to the expansion effort are expensed immediately.

Landfill Assets. Landfill assets include the costs of landfill site acquisition, permits and cell construction incurred to date. These amounts are amortized under the units-of-consumption method such that the asset is completely amortized when the landfill ceases accepting waste. Changes in the determination of when the landfill will cease accepting waste, either through a business decision by management, determination that expansion capacity should no longer be considered probable or changes in estimates on annual airspace consumption, will impact the amortization expense of the landfill assets.

Landfill Capacity. Landfill capacity, which is the basis for the amortization of landfill assets and for the accrual of final closure and post-closure obligations, represents total permitted airspace plus unpermitted airspace that management believes is probable of ultimately being permitted based on established criteria. As of December 31, 2020, there were no unpermitted expansions included in management's landfill calculation. If actual expansion airspace is significantly different from management's estimate of expansion airspace, the amortization rates used for the units-of-consumption method would change, therefore impacting our profitability. If we determine that there is less actual expansion airspace at a landfill, this would increase amortization expense recorded and decrease profitability, while if we determine a landfill has more actual expansion airspace, amortization expense would decrease and profitability would increase.

Landfill Final Closure and Post-Closure Liabilities. The balance of landfill final closure and post-closure liabilities at December 31, 2020 and 2019 was $48.4 million and $39.4 million, respectively. We have material financial commitments for the costs associated with requirements of the EPA and the comparable regulatory agency in Canada for landfill final closure and post-closure activities. In the United States, the landfill final closure and post-closure requirements are established under the standards of the EPA, and are implemented and applied on a state-by-state basis. We develop estimates for the cost of these activities based on our evaluation of site-specific facts and circumstances, such as the existence of structures and other landfill improvements that would need to be dismantled, the amount of groundwater monitoring and leachate management expected to be performed and the length of the post-closure period as determined by the applicable regulatory agency. Included in our cost estimates are our interpretation of current regulatory requirements and proposed regulatory changes. These cost estimates may change in the future due to various circumstances including, but not limited to, permit modifications, changes in legislation or regulations, technological changes and results of environmental studies. We perform zero-based reviews of these estimated liabilities based upon a planned schedule, typically every five years or sooner if the occurrence of a significant event is likely to change the timing or amount of the currently estimated expenditures. We consider a significant event to be a new regulation or an amendment to an existing regulation, a new permit or modification to an existing permit or a change in the market price of a significant cost item. Our cost estimates are calculated using internal sources as well as input from third-party experts. These costs are measured at estimated fair value using present value techniques, and therefore changes in the estimated timing of closure and post-closure activities would affect the liability, the value of the related asset and our results of operations.

Final closure costs are the costs incurred after the site ceases to accept waste, but before the landfill is certified as closed by the applicable state or provincial regulatory agency. These costs generally include the costs required to cap the final cell of the landfill (if not included in cell closure), dismantle certain structures for landfills and other landfill improvements and regulation-mandated groundwater monitoring and leachate management. Post-closure costs involve the maintenance and monitoring of a landfill site that has been certified closed by the applicable regulatory agency. These costs generally include groundwater monitoring and leachate management. Regulatory post-closure periods are generally 30 years after landfill closure. Final closure and post-closure obligations are accrued on a units-of-consumption basis, such that the present value of the final closure and post-closure obligations are fully accrued at the date the landfill discontinues accepting waste. Changes in the determination of when the landfill will cease accepting waste, either through a business decision by management, determination that expansion capacity should no longer be considered probable or changes in estimates on annual airspace consumption, will accelerate accrual of these costs.

Non-Landfill Closure and Post-Closure Liabilities. The balance of our non-landfill closure and post-closure liabilities at December 31, 2020 and 2019 was $39.5 million and $36.3 million, respectively. We base estimates for non-landfill closure and post-closure liabilities on our interpretations of existing permit and regulatory requirements for closure and post-closure maintenance and monitoring. Our cost estimates are calculated using internal sources as well as input from third-party experts. We estimate when future operations will cease and inflate the current cost of closing the non-landfill facility using the appropriate inflation rate and then discounting the future value to arrive at an estimated present value of closure and post-closure costs. The estimates for non-landfill closure and post-closure liabilities are inherently uncertain due to the possibility that permit and regulatory requirements will change in the future, impacting the estimation of total costs and the timing of the expenditures. We review non-landfill closure and post-closure liabilities for changes to key assumptions that would impact the amount of the recorded liabilities. Changes that would prompt us to revise a liability estimate include changes in legal requirements that impact our expected closure plan or scope of work, in the market price of a significant cost item, in estimates as to when future operations may cease or in the expected timing of the cost expenditures. Changes in estimates for non-landfill closure and post-closure events immediately impact the required liability and the value of the corresponding asset. If a change is made to a fully-amortized asset, the adjustment is charged immediately to expense. When a change in estimate relates to an asset that has not been fully amortized, the adjustment to the asset is recognized in income prospectively as a component of amortization. Historically, material changes to non-landfill closure and post-closure estimates have been infrequent. See Note 9, "Closure and Post-Closure Liabilities," to our consolidated financial statements included in Item 8 of this report for the changes to these Landfill and Non-Landfill Closure and Post-Closure liabilities during the years ended December 31, 2020 and 2019.

Remedial Liabilities. The balance of our remedial liabilities at December 31, 2020 and 2019 was $114.8 million and $114.2 million, respectively. Remedial liabilities are obligations to investigate, alleviate and/or eliminate the effects of a release (or threat of a release) of hazardous substances into the environment and may also include corrective action under RCRA or the corresponding Canadian regulations. Our remediation obligations can be further characterized as legal, Superfund, long-term maintenance and one-time projects. Legal liabilities are typically comprised of litigation matters that involve potential liability for certain aspects of environmental cleanup and can include third-party claims for property damage or bodily injury allegedly arising from or caused by exposure to hazardous substances originating from our activities or operations or, in certain cases, from the actions or inactions of other persons or companies. Superfund liabilities are typically claims alleging that we are a potentially responsible party ("PRP") and/or are potentially liable for environmental response, removal, remediation and cleanup costs at/or from either a facility we own or a site owned by a third-party. As described in Note 17, "Commitments and Contingencies," to our consolidated financial statements included in Item 8 of this report, Superfund liabilities also include certain liabilities payable to government entities for which we are potentially liable to reimburse the sellers in connection with our 2002 acquisition of substantially all of the assets of the Chemical Services Division (the "CSD assets") of Safety-Kleen Corp. Long-term maintenance liabilities include the costs of groundwater monitoring, treatment system operations, permit fees and facility maintenance for inactive operations. One-time projects liabilities include the costs necessary to comply with regulatory requirements for the removal or treatment of contaminated materials.

Amounts recorded related to the costs required to remediate a location are determined by internal engineers and operational personnel and incorporate input from external third parties. The estimates consider such factors as the nature and extent of environmental contamination (if any); the terms of applicable permits and agreements with regulatory authorities as to cleanup procedures and whether modifications to such permits and agreements will likely need to be negotiated; the cost of performing anticipated cleanup activities based upon current technology; and in the case of Superfund and other sites where other parties will also be responsible for a portion of the cleanup costs, the likely allocation of such costs and the ability of such other parties to pay their share. Each quarter, our management discusses if any events have occurred or milestones have been met that would warrant the creation of a new remedial liability or the revision of an existing remedial liability. Such events or milestones include identification and verification as a PRP, receipt of a unilateral administrative order under Superfund or requirement for RCRA interim corrective measures, completion of the feasibility study under Superfund or the corrective measures study under RCRA, new or modifications to existing permits, changes in property use or a change in the market price of a significant cost item. Remedial liabilities are inherently difficult to estimate and there is a risk that the actual quantities of contaminants could differ from the results of the site investigation, which could materially impact the amount of our liability. It is also possible that chosen methods of remedial solutions will not be successful and funds will be required for alternative solutions.

Remedial liabilities are discounted when the timing of the payments is estimable and the amounts are determinable, with the exception of remedial liabilities assumed as part of an acquisition that are measured at fair value at the acquisition date.

We establish reserves for estimated environmental liabilities based on acceptable technologies when we determine the liability is appropriate. Introductions of new technologies are subject to successful demonstration of the effectiveness of the alternative technology and regulatory approval. We routinely review and evaluate the sites for which we have established estimated environmental liabilities reserves to determine if there should be changes in the established reserves. The changes in estimates are reflected as adjustments in the ordinary course of business in the period when we determine that an adjustment is appropriate as new information becomes available. Upon demonstration of the effectiveness of the alternative technology and applicable regulatory approval, we update our estimated cost of remediating the affected sites. See Note 10, "Remedial Liabilities," to our consolidated financial statements included in Item 8 of this report for the changes to the remedial liabilities during the years ended December 31, 2020 and 2019. The changes in our estimates have not been material.

Goodwill and Other Long-Lived Assets. Goodwill is reviewed for impairment annually as of December 31 or when events or changes in the business environment indicate the carrying value of a reporting unit may exceed its fair value. This review is performed by comparing the fair value of each reporting unit to its carrying value, including goodwill. If the fair value is less than the carrying amount, a loss is recorded for the excess of the carrying value over the fair value up to the carrying amount of goodwill.

We determine our reporting units by identifying the components of each operating segment, and then in some circumstances aggregate components having similar economic characteristics based on quantitative and/or qualitative factors. As of December 31, 2020, we have four reporting units, consisting of Environmental Sales and Service, Environmental Facilities, Safety-Kleen Oil and Safety-Kleen Environmental Services.

We conducted our annual impairment test of goodwill for all of our reporting units as of December 31, 2020 and determined that no adjustment to the carrying value of goodwill for any reporting unit was then necessary. In all cases the estimated fair value of each reporting unit significantly exceeded its carrying value. We measure fair value for all of our reporting units using an income approach (a discounted cash flow analysis) which incorporates several estimates and assumptions with varying degrees of uncertainty. The discounted cash flow analyses include estimated cash flows for a discrete period and for a terminal period thereafter. We corroborate our estimates of fair values by also considering other factors such as the fair value of comparable companies to businesses contained in our reporting units, as well as performing a reconciliation of the total estimated fair value of all reporting units to our market capitalization.

Indefinite-lived intangible assets are not amortized but are reviewed for impairment annually as of December 31, or when events or changes in the business environment indicate that the carrying value may be impaired. This review is performed by comparing the fair value of indefinite lived intangible asset to its carrying value. We measure fair value for our indefinite lived intangible assets using an income approach (a discounted cash flow analysis) which incorporates several estimates and assumptions with varying degrees of uncertainty, including estimates of future cash flows associated with the intangible assets. If the fair value is less than the carrying value, the impairment loss is measured as the excess of the carrying value of the asset over its fair value. The estimated fair values of the indefinite-lived intangibles exceeded their carrying values at December 31, 2020. However, we will continue to monitor the performance of our indefinite-lived intangible assets, and future events might result in an impairment of indefinite-lived intangible assets.

Our long-lived assets are carried on our financial statements based on their cost less accumulated depreciation or amortization. Long-lived assets with finite lives are reviewed for impairment whenever events or changes in circumstances indicate that their carrying value may not be entirely recoverable. When such factors and circumstances exist, our management compares the projected undiscounted future cash flows associated with the related asset or group of assets to the respective carrying amounts. The impairment loss, if any, would be measured as the excess of the carrying amount over the fair value of the asset and is recorded in the period in which the determination is made. Any resulting impairment losses recorded by us would have an adverse impact on our results of operations.

In consideration of historical goodwill impairments for our Oil and Gas Field Services and Lodging Services operations and continued lower than historical results in the oil and gas related industries, specifically in Western Canada, we continue to monitor the carrying value of those businesses' long-lived assets and assess the risk of asset impairment. We concluded that no events or circumstances have arisen during 2020 which would indicate that the carrying values of those asset groups are not recoverable.

We will continue to evaluate all of our goodwill and other long-lived assets impacted by economic downturns, including the impact of COVID-19 on our operations. The market conditions which could lead to such future impairments are currently most prevalent in Oil and Gas Field Services and Lodging Services operations within our Environmental Sales & Services reporting unit and in our Safety-Kleen Oil reporting unit.

Our future cash flow assumptions and conclusions with respect to goodwill and asset impairments could be impacted by changes arising from (i) a further significant deterioration in market conditions arising from COVID-19, (ii) a sustained period of economic and industrial slowdowns resulting from social distancing guidelines and/or larger scale economic shutdowns, (iii) continued reduced demand for base and blended oil products and an inability to price our oil related products and services to maintain profitability, (iv) inability to scale our operations and implement cost reduction efforts in light of reduced demand or (v) a significant decline in our share price for a sustained period of time. These factors, among others, could significantly impact the impairment analysis and may result in future goodwill or asset impairment charges that, if incurred, could have a material adverse effect on our financial condition and results of operations.

Legal Matters. As described in Note 17, "Commitments and Contingencies," to our consolidated financial statements included in Item 8 of this report, we are subject to legal proceedings which relate to our past acquisitions or which have arisen in the ordinary course of business. Accruals are established for legal matters when, in our opinion, it is probable that a liability exists and the liability can be reasonably estimated. As of December 31, 2020, we had reserves of $29.8 million consisting of (i) $24.0 million related to pending legal or administrative proceedings, including Superfund liabilities, which were included in remedial liabilities on the consolidated balance sheets and (ii) $5.8 million primarily related to legal claims as well as federal, state and provincial enforcement actions, which were included in accrued expenses on the consolidated balance sheets. In management's opinion, it is not reasonably possible that the potential liability in excess of what is recorded, if any, that may result from these actions, either individually or collectively, will have a material effect on our financial position, results of operations or cash flows.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, we are exposed to market risks, including changes in interest rates and certain foreign currency rates, primarily relating to the Canadian dollar. Our philosophy in managing interest rate risk is to maintain a debt portfolio inclusive of both variable and fixed-rate debt so as to limit our interest expense and exposure to interest rate volatility. In 2018, we entered into interest rate swap agreements with the intention of hedging interest rate exposure on a portion of our outstanding LIBOR-based variable rate senior secured term loans. Under the terms of the swaps, we receive interest based on the 1-month LIBOR index and pay interest at a weighted average rate of approximately 2.92% on an initial notional amount of $350.0 million. When combined with the 1.75% interest rate margin for Eurocurrency borrowings, the effective annual interest rate on such $350.0 million aggregate principal amount of term loans was therefore approximately 4.67% as of December 31, 2020.

We designated our interest rate swap agreements as effective cash flow hedges at inception, and therefore the change in fair value is recorded in stockholders' equity as a component of accumulated other comprehensive loss and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt.

The following table provides information regarding our fixed and variable rate borrowings at December 31, 2020 (in thousands):

Scheduled Maturity Dates	2021	2022	2023	2024	2025	Thereafter	Total
Senior secured term loans due 2024	$ 7,535	$ 7,535	$ 7,535	$ 704,556	$ —	$ —	$ 727,161
Unsecured senior notes due 2027	—	—	—	—	—	545,000	545,000
Unsecured senior notes due 2029	—	—	—	—	—	300,000	300,000
Long term debt, at par	$ 7,535	$ 7,535	$ 7,535	$ 704,556	$ —	$ 845,000	$ 1,572,161

The interest rate on the $545.0 million senior unsecured notes due July 15, 2027 is fixed at 4.875%. Interest payments on this debt are due semiannually on January 15 and July 15 in the amount of $13.3 million upon each date. The interest rate on the $300.0 million senior unsecured notes due July 15, 2029 is fixed at 5.125%. Interest payments on these $300.0 million senior unsecured notes are also due semiannually on January 15 and July 15 in the amount of $7.7 million upon each date.

We continue to have interest rate risk relative to the portion of our term loans which exceeds the $350.0 million of principal which is subject to our interest rate swap agreements. As of December 31, 2020, $377.2 million of those term loans was subject to variable interest rate risk. The effective interest rate on the variable portion of the term loans as of December 31, 2020 was 1.90%. Should the average interest rate on the variable rate portion of our long-term debt change by 100 basis points, we estimate that our annual interest expense would change by up to approximately $3.7 million.

In addition to the fixed and variable rate borrowings described in the above table, we have a revolving credit agreement with maximum borrowings of up to $400.0 million (with a $300.0 million sub-limit for letters of credit), under which no borrowings were outstanding at December 31, 2020.

We view our investment in our foreign subsidiaries as long-term; thus, we have not entered into any hedging transactions between any two foreign currencies or between any of the foreign currencies and the U.S. Dollar. Given our significant investment in Canada and the fluctuations that have and can occur between the U.S. Dollar and Canadian Dollar exchange rates, significant movements in cumulative translation adjustment amounts recorded as a component of other comprehensive income (loss) can occur in any given period.

During 2020, our Canadian subsidiaries transacted a portion of their business in U.S. Dollars and at any period end had cash on deposit in U.S. Dollars and outstanding U.S. Dollar accounts receivable related to those transactions. Those cash and receivable amounts are subject to foreign currency gains or losses. Exchange rate movements also affect the translation of Canadian generated profits and losses into U.S. Dollars. Had the Canadian Dollar been 10.0% stronger or weaker against the U.S. Dollar, we would have reported increased or decreased net income of $1.1 million and $5.3 million for the years ended December 31, 2020 and 2019, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Clean Harbors, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Clean Harbors, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income, cash flows and stockholders' equity, for each of the three years in the period ended December 31, 2020, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 24, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Remedial Liabilities - Refer to Note 2, Significant Accounting Policies, and Note 10, Remedial Liabilities, to the financial statements

Critical Audit Matter Description

Remedial liabilities include the costs of removal or containment of contaminated material, the treatment of potentially contaminated groundwater and maintenance and monitoring costs necessary to comply with regulatory requirements. The estimate of remedial liabilities involves an analysis of numerous factors including: (i) the nature and extent of environmental contamination, (ii) the terms of applicable permits and level of regulatory oversight, (iii) the cost of performing the cleanup activities, and (iv) the adjudication of certain complex matters, particularly Superfund sites, involving multiple parties. Remedial liabilities are inherently difficult to estimate and involve a significant amount of judgment. The Company routinely reviews and evaluates the sites for which remedial liabilities have been recognized to determine if there should be changes in the cost estimates. As a result, the valuation of liabilities is subject to material changes as additional information becomes available, particularly as it relates to changes in technologies and changes in laws and regulations that govern the remediation efforts.

Total remedial liabilities recorded as of December 31, 2020 were $114.8 million.

Given the subjectivity and judgment involved in measuring remedial liabilities, auditing remedial liabilities involved especially subjective judgment and an increased extent of effort, including the need to involve our specialists who have expertise in environmental remediation.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the remedial liabilities included the following, among others:

- We tested the effectiveness of controls related to the recognition and measurement of remedial liabilities, including those controls over changes in estimates.
- We evaluated management’s ability to accurately forecast future cash flows by comparing actual results to management’s historical forecasts through retrospective reviews.
- We evaluated the methods and assumptions used by management to estimate the remedial liabilities by confirming specific facts and circumstances related to a selection of sites with project managers and other Company personnel responsible for monitoring these sites, including legal counsel.
- With the assistance of auditor specialists who have expertise in environmental matters and specialized skills and training, we evaluated the reasonableness of the Company’s estimates by:
    - Searching for information in the public domain for completeness of sites identified for remediation.
    - Assessing the completeness of the Company’s costs estimate for a selection of sites, specifically, comparing the costs estimates to relevant regulatory guidelines and specifications.
    - Testing the accuracy of the amounts recorded for a selection of sites, specifically, verifying the mathematical accuracy of the calculation, agreeing cost components to supporting documents, and/or developing an independent range of cost estimates.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
February 24, 2021

We have served as the Company's auditor since 2005.

CLEAN HARBORS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(dollars in thousands)

	As of December 31, 2020	As of December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 519,101	$ 371,991
Short-term marketable securities	51,857	42,421
Accounts receivable, net of allowances aggregating $44,749 and $38,711, respectively	611,534	644,738
Unbilled accounts receivable	55,681	56,326
Inventories and supplies	220,498	214,744
Prepaid expenses and other current assets	67,051	70,688
Total current assets	1,525,722	1,400,908
Property, plant and equipment, net	1,525,298	1,588,151
Other assets:		
Operating lease right-of-use assets	150,341	162,206
Goodwill	527,023	525,013
Permits and other intangibles, net	386,620	419,066
Other	16,516	13,560
Total other assets	1,080,500	1,119,845
Total assets	$ 4,131,520	$ 4,108,904
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 7,535	$ 7,535
Accounts payable	195,878	298,375
Deferred revenue	74,066	73,370
Accrued expenses	295,823	276,540
Current portion of closure, post-closure and remedial liabilities	26,093	23,301
Current portion of operating lease liabilities	36,750	40,979
Total current liabilities	636,145	720,100
Other liabilities:		
Closure and post-closure liabilities, less current portion of $13,903 and $7,283, respectively	74,023	68,368
Remedial liabilities, less current portion of $12,190 and $16,018, respectively	102,623	98,155
Long-term debt, less current portion	1,549,641	1,554,116
Operating lease liabilities, less current portion	114,258	121,020
Deferred tax liabilities	230,097	231,337
Other long-term liabilities	83,182	45,995
Total other liabilities	2,153,824	2,118,991
Commitments and contingent liabilities (See Note 17)		
Stockholders' equity:		
Common stock, $0.01 par value:		
Authorized 80,000,000 shares; issued and outstanding 54,772,696 and 55,797,734 shares, respectively	548	558
Additional paid-in capital	582,749	644,412
Accumulated other comprehensive loss	(211,477)	(210,051)
Accumulated earnings	969,731	834,894
Total stockholders' equity	1,341,551	1,269,813
Total liabilities and stockholders' equity	$ 4,131,520	$ 4,108,904

The accompanying notes are an integral part of these consolidated financial statements.

CLEAN HARBORS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands except per share amounts)

	For the years ended December 31, 2020	2019	2018
Revenues:			
Service revenues	$ 2,724,584	$ 2,842,881	$ 2,709,239
Product revenues	419,513	569,309	591,064
Total revenues	3,144,097	3,412,190	3,300,303
Cost of revenues: (exclusive of items shown separately below)			
Service revenues	1,786,718	1,945,021	1,861,975
Product revenues	351,033	442,798	443,576
Total cost of revenues	2,137,751	2,387,819	2,305,551
Selling, general and administrative expenses	451,044	484,054	503,747
Accretion of environmental liabilities	11,051	10,136	9,806
Depreciation and amortization	292,915	300,725	298,625
Income from operations	251,336	229,456	182,574
Other (expense) income, net	(290)	2,897	(4,510)
Loss on early extinguishment of debt	—	(6,131)	(2,488)
(Loss) gain on sale of businesses	(3,376)	687	—
Interest expense, net of interest income of $3,462, $4,227 and $2,958, respectively	(73,120)	(78,670)	(81,094)
Income before provision for income taxes	174,550	148,239	94,482
Provision for income taxes	39,713	50,499	28,846
Net income	$ 134,837	$ 97,740	$ 65,636
Earnings per share:			
Basic	$ 2.43	$ 1.75	$ 1.17
Diluted	$ 2.42	$ 1.74	$ 1.16
Shares used to compute earnings per share — Basic	55,479	55,845	56,148
Shares used to compute earnings per share — Diluted	55,690	56,129	56,340

The accompanying notes are an integral part of these consolidated financial statements.

CLEAN HARBORS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	For the years ended December 31,		
	2020	2019	2018
Net income	$ 134,837	$ 97,740	$ 65,636
Other comprehensive (loss) income, net of tax:			
Unrealized (losses) gains on available-for-sale securities	(8)	(120)	77
Reclassification adjustment for losses on available-for-sale securities included in net income	—	332	—
Unrealized loss on interest rate hedge	(20,970)	(14,401)	(9,579)
Reclassification adjustment for losses on interest rate hedge included in net income	8,180	2,335	806
Foreign currency translation adjustments	11,561	25,130	(42,350)
Unrealized (loss) gain on net pension liability	(189)	44	82
Other comprehensive (loss) income, net of tax	(1,426)	13,320	(50,964)
Comprehensive income	$ 133,411	$ 111,060	$ 14,672

The accompanying notes are an integral part of these consolidated financial statements.

CLEAN HARBORS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	For the years ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net income	$ 134,837	$ 97,740	$ 65,636
Adjustments to reconcile net income to net cash from operating activities:			
Depreciation and amortization	292,915	300,725	298,625
Allowance for doubtful accounts	10,133	2,408	15,817
Amortization of deferred financing costs and debt discount	3,666	3,809	3,846
Accretion of environmental liabilities	11,051	10,136	9,806
Changes in environmental liability estimates	10,698	(332)	2,147
Deferred income taxes	(9,748)	8,005	19,089
Other expense (income), net	290	(2,897)	4,510
Stock-based compensation	18,502	17,816	16,792
Loss (gain) on sale of businesses	3,376	(687)	—
Loss on early extinguishment of debt	—	6,131	2,488
Environmental expenditures	(12,401)	(18,701)	(10,115)
Changes in assets and liabilities, net of acquisitions:			
Accounts receivable and unbilled accounts receivable	22,422	(33,271)	(79,563)
Inventories and supplies	(7,933)	(15,869)	(26,958)
Other current and non-current assets	(12,602)	(14,421)	(7,946)
Accounts payable	(80,328)	7,153	46,915
Other current and long-term liabilities	45,719	45,447	12,121
Net cash from operating activities	430,597	413,192	373,210
Cash flows used in investing activities:			
Additions to property, plant and equipment	(196,256)	(216,324)	(193,344)
Proceeds from sale and disposal of fixed assets	9,623	11,655	15,445
Acquisitions, net of cash acquired	(8,839)	(29,363)	(151,023)
Additions to intangible assets including costs to obtain or renew permits	(2,029)	(3,904)	(4,688)
Purchases of available-for-sale securities	(70,891)	(35,836)	(44,772)
Proceeds from sale of available-for-sale securities	61,220	51,202	28,723
Proceeds from sale of businesses, net of transactional costs	7,712	4,714	—
Net cash used in investing activities	(199,460)	(217,856)	(349,659)
Cash flows used in financing activities:			
Change in uncashed checks	5,404	(3,705)	132
Tax payments related to withholdings on vested restricted stock	(5,331)	(7,429)	(3,266)
Repurchases of common stock	(74,844)	(21,390)	(45,080)
Deferred financing costs paid	(2,171)	(10,079)	(4,027)
Payments on finance leases	(4,469)	(586)	—
Premiums paid on early extinguishment of debt	—	(2,701)	(1,238)
Principal payments on debt	(7,535)	(852,535)	(405,768)
Proceeds from issuance of debt, net of discount	—	845,000	348,250
Borrowings from revolving credit facility	150,000	—	50,000
Payments on revolving credit facility	(150,000)	—	(50,000)
Net cash used in financing activities	(88,946)	(53,425)	(110,997)
Effect of exchange rate change on cash	4,919	3,573	(5,446)
Increase (decrease) in cash and cash equivalents	147,110	145,484	(92,892)
Cash and cash equivalents, beginning of year	371,991	226,507	319,399
Cash and cash equivalents, end of year	$ 519,101	$ 371,991	$ 226,507
Supplemental information:			
Cash payments for interest and income taxes:			
Interest paid	$ 72,535	$ 60,852	$ 89,171
Income taxes paid, net of refunds	53,123	27,035	20,036
Non-cash investing activities:			
Property, plant and equipment accrued	3,536	30,964	15,657
Payable for estimated purchase price adjustment	—	—	4,032

The accompanying notes are an integral part of these consolidated financial statements.

CLEAN HARBORS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock					
	Number of Shares	$0.01 Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Earnings	Total Stockholders' Equity
Balance at January 1, 2018	56,501	$ 565	$ 686,962	$ (172,407)	$ 673,082	$ 1,188,202
Net income	—	—	—	—	65,636	65,636
Cumulative effect of change in accounting for stock based compensation	—	—	—	—	(1,564)	(1,564)
Other comprehensive loss	—	—	—	(50,964)	—	(50,964)
Stock-based compensation	—	—	16,792	—	—	16,792
Issuance of common stock for restricted share vesting, net of employee tax withholdings	160	1	(3,267)	—	—	(3,266)
Repurchases of common stock	(814)	(8)	(45,072)	—	—	(45,080)
Balance at December 31, 2018	55,847	558	655,415	(223,371)	737,154	1,169,756
Net income	—	—	—	—	97,740	97,740
Other comprehensive income	—	—	—	13,320	—	13,320
Stock-based compensation	—	—	17,816	—	—	17,816
Issuance of common stock for restricted share vesting, net of employee tax withholdings	249	3	(7,432)	—	—	(7,429)
Repurchases of common stock	(298)	(3)	(21,387)	—	—	(21,390)
Balance at December 31, 2019	55,798	558	644,412	(210,051)	834,894	1,269,813
Net income	—	—	—	—	134,837	134,837
Other comprehensive loss	—	—	—	(1,426)	—	(1,426)
Stock-based compensation	—	—	18,502	—	—	18,502
Issuance of common stock for restricted share vesting, net of employee tax withholdings	179	2	(5,333)	—	—	(5,331)
Repurchases of common stock	(1,204)	(12)	(74,832)	—	—	(74,844)
Balance at December 31, 2020	54,773	$ 548	$ 582,749	$ (211,477)	$ 969,731	$ 1,341,551

The accompanying notes are an integral part of these consolidated financial statements.

CLEAN HARBORS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) OPERATIONS

Clean Harbors, Inc., through its subsidiaries (collectively, the "Company"), is a leading provider of environmental and industrial services throughout North America. The Company is also the largest re-refiner and recycler of used oil and the largest provider of parts cleaning and related environmental services to commercial, industrial and automotive customers in North America.

A novel strain of coronavirus ("COVID-19") was first identified in December 2019, and subsequently declared a global pandemic by the World Health Organization on March 11, 2020. As a result of the outbreak, many companies experienced significant disruptions in their operations, workforce and markets served, also resulting in a significant reduction in the demand for petroleum-based products. Areas of the Company's businesses and operations were adversely impacted by the effects of COVID-19 when circumstances surrounding and responses to the pandemic, including stay-at-home orders, began to materialize in North America. These disruptions had a significant impact on the Company's operating results for the year ended December 31, 2020. The Company expects that operations will continue to be impacted. The full extent of the ongoing COVID-19 pandemic and the resulting changes in demand for oil and the impact on the Company's operations is uncertain. A prolonged disruption could have a material adverse impact on financial results and business operations of the Company.

(2) SIGNIFICANT ACCOUNTING POLICIES

The accompanying consolidated financial statements of the Company reflect the application of certain significant accounting policies as described below:

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Clean Harbors, Inc. and its majority-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions, which are evaluated on an ongoing basis, that affect the amounts reported in the Company's consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and on various other assumptions it believes to be reasonable at the time under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and disclosure, if any, of contingent assets and liabilities and reported amounts of revenues and expenses. Actual results could differ from those estimates and judgments.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation. These reclassifications have no impact on previously reported subtotals.

Cash, Cash Equivalents and Uncashed Checks

Cash consists primarily of cash on deposit and money market accounts. Marketable securities with maturities of three months or less from the date of purchase are classified as cash equivalents. The Company's cash management program with its revolving credit lender allows for the maintenance of a zero balance in the U.S. bank disbursement accounts that are used to issue vendor and payroll checks. When checks are presented to the bank for payment, cash deposits in amounts sufficient to fund the checks are made, at the Company's discretion, either from funds provided by other accounts or under the terms of the Company's revolving credit facility. Checks that have been written to vendors or employees but have not yet been presented for payment at the Company's bank are classified as uncashed checks as part of accounts payable and changes in the balance are reported as a financing activity in the consolidated statements of cash flows.

Marketable Securities

The Company, through its wholly-owned captive insurance subsidiary, invests in marketable securities consisting of U.S. Treasury securities, corporate notes and bonds and commercial paper. As of December 31, 2020 and 2019, the Company had total marketable securities and cash equivalents as follows (in thousands):

	December 31, 2020	December 31, 2019
Commercial paper	$ —	$ 2,395
Total cash equivalents	—	2,395
U.S. Treasury securities	28,901	12,406
Corporate notes and bonds	22,956	26,678
Commercial paper	—	3,337
Total marketable securities	51,857	42,421
Total	$ 51,857	$ 44,816

Realized gains and losses on sales of available-for-sale marketable securities in the years presented were immaterial. The majority of the marketable securities have a remaining maturity of less than one year and fair value approximates cost.

Allowances for Doubtful Accounts

On a regular basis, the Company evaluates its accounts receivable and establishes the allowance for doubtful accounts based on an evaluation of certain criteria and evidence of collection certainty including historical collection trends, reasonable expectations of future collections, current economic trends and changes in customer payment patterns. Past-due receivable balances are written off when the Company's internal collection efforts have been deemed unsuccessful in collecting the outstanding balance due.

Credit Concentration

Concentration of credit risks in accounts receivable is limited due to the large number of customers comprising the Company's customer base throughout North America. The Company maintains policies over credit extension that include credit evaluations, credit limits and collection monitoring procedures on a customer-by-customer basis. However, the Company generally does not require collateral before services are performed. No individual customer accounted for more than 10% of accounts receivable or more than 10% of total direct revenues in the periods presented.

Inventories and Supplies

Inventories are stated at the lower of cost or market. The cost of oil and oil products is principally determined on a first-in, first-out ("FIFO") basis. The cost of supplies and drums, solvent and solution and other inventories is determined on a FIFO basis. The Company continually reviews its inventories for obsolete or unsalable items and adjusts its carrying value to reflect estimated realizable values.

Property, Plant and Equipment, net (excluding landfill assets and finance lease right of use assets)

Property, plant and equipment, net is stated at cost less accumulated depreciation. Expenditures for major renewals and improvements which extend the life or usefulness of the asset are capitalized. Items of an ordinary repair or maintenance nature are charged directly to operating expense as incurred. Gains and losses on the sale of property, plant and equipment are included in other (expense) income, net. During the construction and development period of an asset, the costs incurred are classified as construction-in-progress. When the asset is ready for its intended use, the asset is reclassified to an appropriate asset classification and depreciation or amortization commences. The Company depreciates and amortizes the capitalized cost of these assets, using the straight-line method as follows:

Asset Classification	Estimated Useful Life
Buildings and building improvements	
Buildings	20-42 years
Leasehold and building improvements	2-45 years
Camp and lodging equipment	8-15 years
Vehicles	2-15 years
Equipment	
Capitalized software and computer equipment	3-5 years
Containers and railcars	8-16 years
All other equipment	4-30 years
Furniture and fixtures	5-8 years

The Company tests asset groups for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. An impairment in the carrying value of long-lived assets is recognized if the expected future undiscounted cash flows derived from the assets, or group of assets, are less than their carrying value. The Company did not record any impairment charges related to long-lived assets in the periods presented.

Goodwill

Goodwill is comprised of the purchase price of business acquisitions in excess of the fair value of the net assets acquired. Goodwill is reviewed for impairment annually as of December 31, or when events or circumstances indicate that the carrying value of the reporting unit may exceed its fair value. If the carrying value of a reporting unit exceeds the fair value, an impairment loss will be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. The Company did not recognize any impairment losses in any of the periods presented. See Note 7, "Goodwill and Other Intangible Assets," for additional information related to the Company's goodwill impairment tests.

Permits and Other Intangibles

Costs related to acquiring licenses, permits and intangible assets, such as legal fees, site surveys, engineering costs and other expenditures are capitalized. Other intangible assets consist primarily of customer and supplier relationships, trademarks and trade names and non-compete agreements.

Permits relating to landfills are amortized on a units-of-consumption basis. All other permits are amortized over periods ranging from five to 30 years on a straight-line basis. Finite-lived intangible assets are amortized on a straight-line basis over their respective useful lives, which range from five to 20 years.

All finite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. When such factors and circumstances exist, management compares the projected undiscounted future cash flows associated with the related asset or group of assets to the carrying amount. The impairment loss, if any, is measured as the excess of the carrying amount over the fair value of the asset or group of assets.

Indefinite-lived intangible assets are not amortized but are reviewed for impairment annually as of December 31, or when events or changes in the business environment indicate that the carrying value may be impaired. If the fair value of the asset is less than the carrying amount, the impairment loss is measured as the excess of the carrying value of the asset over its fair value.

Landfill Accounting

The Company amortizes landfill improvements and certain landfill-related permits over the estimated useful lives. The units-of-consumption method is used to amortize land, landfill cell construction, asset retirement costs and remaining landfill cells and sites. The Company also utilizes the units-of-consumption method to record closure and post-closure obligations for landfill cells and sites. Under the units-of-consumption method, the Company includes future estimated construction and asset retirement costs, as well as costs incurred to date, in the amortization base of the landfill assets. Additionally, where appropriate, as described below, the Company includes probable expansion airspace that has yet to be permitted in the calculation of the total remaining useful life of the landfill. If it is determined that expansion capacity should no longer be considered in calculating the recoverability of a landfill asset, the Company may be required to recognize an asset impairment or incur significantly higher amortization expense. If at any time the Company makes the decision to abandon the expansion effort, the capitalized costs related to the expansion effort are expensed immediately.

Landfill assets—Landfill assets include the costs of landfill site acquisition, permits and cell construction incurred to date. These amounts are recorded at cost, which includes capitalized interest as applicable. Landfill assets, net of amortization, are combined with management's estimate of the costs required to complete construction of the landfill to determine the amount to be amortized over the remaining estimated useful economic life of a site. Amortization of landfill assets is recorded on a units-of-consumption basis, such that the landfill assets should be completely amortized at the date the landfill ceases accepting waste. Amortization totaled $10.9 million, $12.3 million and $10.3 million for the years ended December 31, 2020, 2019 and 2018, respectively. Changes in the determination of when the landfill will cease accepting waste, either through a business decision by the Company, determination that expansion capacity should no longer be considered probable or changes in estimates on annual airspace consumption, will impact the amortization expense of the landfill assets. Changes in estimated costs to complete construction are applied prospectively to the amortization rate.

Landfill capacity—Landfill capacity, which is the basis for the amortization of landfill assets and for the accrual of final closure and post-closure obligations, represents total permitted airspace plus unpermitted airspace that management believes is highly probable of ultimately being permitted. As of December 31, 2020, there were no unpermitted expansions included in the Company's landfill accounting model. If actual expansion airspace is significantly different from management's estimate of expansion airspace, the amortization rates used for the units-of-consumption method would change, therefore impacting our profitability.

As of December 31, 2020, the Company had 9 active landfill sites (including the Company's two non-commercial landfills), which have estimated remaining lives (based on anticipated waste volumes and remaining highly probable airspace) as follows:

Facility Name	Location	Remaining Lives (Years)	Permitted Remaining Highly Probable Airspace (cubic yards) (in thousands)
Buttonwillow	California	22	5,739
Deer Park	Texas	2	67
Deer Trail	Colorado	27	1,629
Grassy Mountain	Utah	41	4,710
Kimball	Nebraska	6	144
Lambton	Ontario, Canada	51	4,633
Lone Mountain	Oklahoma	32	3,803
Ryley	Alberta, Canada	5	575
Sawyer	North Dakota	68	3,416
			24,716

At December 31, 2020 and 2019, the Company had no cubic yards of permitted, but not highly probable, airspace.

The following table presents the remaining highly probable airspace from January 1, 2018 through December 31, 2020 (in thousands of cubic yards):

	2020	2019	2018
Remaining capacity, beginning of year	28,494	29,760	31,113
Changes in highly probable airspace, net	(2,962)	—	(223)
Consumed	(816)	(1,266)	(1,130)
Remaining capacity, end of year	24,716	28,494	29,760

During the year ended December 31, 2020, the Company took actions to begin the closure of two of the Company's commercial landfill sites, Altair and Westmorland, and is therefore classifying these landfills as inactive as of December 31, 2020. During 2020, the Altair landfill, a non-hazardous landfill, reached permitted capacity. Airspace consumed from the Altair landfill in the years ended December 31, 2020, 2019 and 2018 was 25, 132 and 127 thousand cubic yards, respectively. During 2020, the Company decided to close the Westmorland landfill, a hazardous landfill, due to the costs of obtaining and maintaining permits and operating the landfill. No airspace had been consumed at the Westmorland landfill in the years ended December 31, 2020, 2019 and 2018. The change in the highly probable airspace, net in the table above is predominately the result of the Company's decision to close the Westmorland and Altair landfills.

Amortization of cell construction costs and accrual of cell closure obligations—Landfills are typically comprised of a number of cells, which are constructed within a defined acreage (or footprint). The cells are typically discrete units, which require both separate construction and separate capping and closure procedures. Cell construction costs are the costs required to excavate and construct the landfill cell. These costs are typically amortized on a units-of-consumption basis, such that they are completely amortized when the specific cell ceases accepting waste. In some instances, the Company has landfills that are engineered and constructed as "progressive trenches." In progressive trench landfills, a number of contiguous cells form a progressive trench. In those instances, the Company amortizes cell construction costs over the airspace within the entire trench, such that the cell construction costs will be fully amortized at the end of the trench useful life.

The design and construction of a landfill does not create a landfill asset retirement obligation. Rather, the asset retirement obligation for cell closure (the cost associated with capping each cell) is incurred in relatively small increments as waste is placed in the landfill. Therefore, the cost required to construct the cell cap is capitalized as an asset retirement cost and a liability of an equal amount is established, based on the discounted cash flow associated with each capping event, as airspace is consumed. Spending for cell capping is reflected as environmental expenditures within operating activities in the consolidated statements of cash flows.

Landfill final closure and post-closure liabilities—The balance of landfill final closure and post-closure liabilities at December 31, 2020 and 2019 was $48.4 million and $39.4 million, respectively. The Company has material financial commitments for the costs associated with requirements of the Environmental Protection Agency ("EPA") and the comparable regulatory agency in Canada for landfill final closure and post-closure activities. The Company develops estimates for the cost of these activities based on an evaluation of site-specific facts and circumstances, including the Company's interpretation of current regulatory requirements and proposed regulatory changes. Such estimates may change in the future due to various circumstances including, but not limited to, permit modifications, changes in legislation or regulations, technological changes and results of environmental studies.

Final closure costs are the costs incurred after the site ceases to accept waste, but before the landfill is certified as closed by the applicable state regulatory agency. These costs generally include the costs required to cap the final cell of the landfill (if not included in cell closure), the costs required to dismantle certain structures for landfills and other landfill improvements, and regulation-mandated groundwater monitoring and leachate management. Post-closure costs involve the maintenance and monitoring of a landfill site that has been certified closed by the applicable regulatory agency. These costs generally include groundwater monitoring and leachate management. Regulatory post-closure periods are generally 30 years after landfill closure. Final closure and post-closure obligations are accrued on a units-of-consumption basis, such that the present value of the final closure and post-closure obligations are fully accrued at the date the landfill ceases accepting waste.

Cell closure, final closure and post-closure costs (also referred to as "asset retirement obligations") are calculated by estimating the total obligation in current dollars, adjusted for inflation (1.02% during both 2020 and 2019) and discounted at the Company's credit-adjusted risk-free interest rate (5.60% and 6.02% during 2020 and 2019, respectively).

Non-Landfill Closure and Post-Closure Liabilities

The balance of non-landfill closure and post-closure liabilities at December 31, 2020 and 2019 was $39.5 million and $36.3 million, respectively. Non-landfill closure and post-closure obligations arise when the Company commences non-landfill facility operations and include costs required to dismantle and decontaminate certain structures and other costs incurred during the closure process. Post-closure costs, if required, include associated maintenance and monitoring costs as required by the closure permit. Post-closure periods are performance-based and are not typically specified in terms of years in the closure permit, but generally range from 10 to 30 years or more.

The Company records its non-landfill closure and post-closure liability by: (i) estimating the current cost of closing a non-landfill facility and the post-closure care of that facility, if required, based upon the closure plan that the Company is required to follow under its operating permit, or in the event the facility operates with a permit that does not contain a closure plan, based upon legally enforceable closure commitments made by the Company to various government agencies; (ii) estimates as to when future operations may cease; (iii) cost estimates of closing the non-landfill facility using the inflation rate to the time of closing; and (iv) discounting the future value back to the present using the credit-adjusted risk-free interest rate.

The estimates for non-landfill closure and post-closure liabilities are inherently uncertain due to the possibility that permit and regulatory requirements will change in the future, impacting the estimation of total costs and the timing of the expenditures. Management reviews non-landfill closure and post-closure liabilities for changes to key assumptions that would impact the amount of the recorded liabilities. Changes that would prompt management to revise a liability estimate include changes in legal requirements that impact the Company's expected closure plan or scope of work, in the market price of a significant cost item, in the estimate as to when future operations at a location might cease or in the expected timing of the costs. Changes in estimates for non-landfill closure and post-closure events immediately impact the liability and the value of the corresponding asset. If a change is made to a fully-amortized asset, the adjustment is charged immediately to expense. When a change in estimate relates to an asset that has not been fully amortized, the adjustment to the asset is recognized in income prospectively as a component of amortization. Historically, changes to non-landfill closure and post-closure estimates have not been material.

Remedial Liabilities

The balance of remedial liabilities at December 31, 2020 and 2019 was $114.8 million and $114.2 million, respectively. Remedial liabilities, including Superfund liabilities, include the costs of removal or containment of contaminated material, treatment of potentially contaminated groundwater and maintenance and monitoring costs necessary to comply with regulatory requirements. Most of the Company's remedial liabilities relate to the active and inactive hazardous waste treatment and disposal facilities which the Company acquired in the last 18 years and Superfund sites owned by third parties for which the Company, or the prior owners of certain of the Company's facilities for which the Company may have certain indemnification obligations, have been identified as potentially responsible parties ("PRPs") or potential PRPs. The Company's estimate of remedial liabilities involves an analysis of such factors as: (i) the nature and extent of environmental contamination (if any); (ii) the terms of applicable permits and agreements with regulatory authorities as to cleanup procedures and whether modifications to such permits and agreements will likely need to be negotiated; (iii) the cost of performing anticipated cleanup activities based upon current technology; and (iv) in the case of Superfund and other sites where other parties will also be responsible for a portion of the cleanup costs, the likely allocation of such costs and the ability of such other parties to pay their share. The measurement of remedial liabilities is reviewed at least quarterly and changes in estimates are recognized in the consolidated statements of operations when identified.

The Company periodically evaluates potential remedial liabilities at sites that it owns or operates or to which the Company or the sellers of the Chemical Services Division of Safety-Kleen ("CSD") assets (or the respective predecessors of the Company or such sellers) transported or disposed of waste, including 130 Superfund sites as of December 31, 2020. The Company periodically reviews and evaluates sites requiring remediation giving consideration to the nature (i.e., owner, operator, arranger, transporter or generator) and the extent (i.e., amount and nature of waste hauled to the location, number of years of site operations or other relevant factors) of the Company's (or such sellers') alleged connection with the site, the extent (if any) to which the Company believes it may have an obligation to indemnify cleanup costs in connection with the site, the regulatory context surrounding the site, the accuracy and strength of evidence connecting the Company (or such sellers) to the location, the number, connection and financial ability of other named and unnamed PRPs and the nature and estimated cost of the likely remedy. Where the Company concludes that it is probable that a liability has been incurred and an amount can be estimated, a liability is recognized.

Remedial liabilities are inherently difficult to estimate. Estimating remedial liabilities requires that the existing environmental contamination be understood. There are risks that the actual quantities of contaminants differ from the results of the site investigation, and that contaminants exist that have not been previously identified. In addition, the amount of remedial liabilities recorded is dependent on the remedial method selected. There is a risk that funds will be expended on a remedial solution that is not successful, which could result in the Company incurring the incremental costs of an alternative solution. Such estimates, which are subject to change, are subsequently revised if and when additional or new information becomes available.

Remedial liabilities are discounted when the timing of the payments is determinable and the amounts are estimable. In the case of remedial liabilities assumed in connection with acquisitions, acquired liabilities are recorded at fair value as of the dates of the acquisitions calculated by inflating costs in current dollars using an estimate of future inflation rates as of the respective acquisition dates until the expected time of payment, and then discounting the amount of the payments to their present value using a risk-free discount rate as of the acquisition dates. Discount rates used in the present value determination of the Company's remedial liabilities range from 1.37% to 4.90%.

Self-Insurance Liabilities

The Company self-insures a significant portion of expected losses related to workers' compensation, employee medical, comprehensive general liability and vehicle liability. Liabilities associated with these losses are recorded based on the Company's estimates of the ultimate cost to settle incurred claims. These recorded liabilities are estimated based on independent actuarial estimates and judgments which consider the frequency and settlement amount of historical claims data.

Revenue Recognition

The Company generates service and product revenues through the following operating segments: Environmental Services and Safety-Kleen. The Company recognizes revenue when control of the promised goods or services is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

The majority of the Company’s revenues are for services, which are recognized based on time and materials incurred at contractually agreed-upon rates. Product revenues are recognized when the products are delivered and control transfers to the customer. The Company’s payment terms vary by the type and location of its customers and the products or services offered. The periods between invoicing and when payments are due are not significant. Amounts billed to customers related to shipping and handling are classified as revenue, and the Company's shipping and handling costs are included in costs of revenues. In the course of operations, the Company collects sales tax and other excise taxes from its customers and recognizes a current liability, which is then relieved when the taxes are remitted to the appropriate government authorities. The Company excludes sales and other excise taxes that it collects from customers from its revenues.

The Company's Environmental Services operating segment generally has the following three sources of revenue:

Technical Services—Technical Services revenues are generated from fees charged for waste material management and disposal services including onsite environmental management services, collection and transportation, packaging, recycling, treatment and disposal of waste. Revenue is primarily generated by short-term projects, most of which are governed by master service agreements that are long-term in nature. These master service agreements are typically entered into with the Company's larger customers and outline the pricing and legal frameworks for such arrangements. Services are provided based on purchase orders or agreements with the customer and include prices based upon units of volume of waste, and transportation and other fees. Collection and transportation revenues are recognized over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, using time and materials incurred as a basis for measuring the satisfaction of the performance obligation. Revenues for treatment and disposal of waste are recognized upon completion of treatment, final disposition in a landfill or incineration, or when the waste is shipped to a third-party for processing and disposal. The Company periodically enters into bundled arrangements for the collection and transportation and disposal of waste. For such arrangements, transportation and disposal are considered distinct performance obligations and the Company allocates revenue to each based on the relative standalone selling price (i.e. the estimated price that a customer would pay for the services on a standalone basis). Revenues and the related costs from waste that is not yet completely processed and disposed of are deferred. The deferred revenues and costs are recognized when the disposal services are completed. The period between collection and transportation and the final processing and disposal ranges depending on location of the customer, but generally is measured in days.

Field and Emergency Response Services—Field Services revenues are generated from cleanup services at customer sites or other locations. Services include confined space entry for tank cleaning, site decontamination, large remediation projects, demolition, spill cleanup on land and water, railcar cleaning, product recovery and transfer and vacuum services. Additional services include filtration and water treatment services. Response services for environmental emergencies include any scale from man-made disasters such as oil spills, to natural disasters such as hurricanes. More recently, demand has increased for projects involving contagion disinfection, decontamination and disposal services in response to the COVID-19 pandemic. Field and emergency response services are provided based on purchase orders or agreements with customers and include prices generally based upon daily, hourly or job rates for equipment, materials and personnel. The Company recognizes revenue for these services over time, as the customer receives and consumes the benefits of the service as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred. The duration of such services can be over a number of hours, several days or even months for larger scale projects.

Industrial Services and Other—Industrial Services revenues are generated from industrial and specialty services provided to refineries, mines, upgraders, chemical plants, pulp and paper mills, manufacturing facilities, power generation facilities and other industrial customers throughout North America. Services include in-plant cleaning and maintenance services, plant outage and turnaround services, decoking and pigging, chemical cleaning, high and ultra-high pressure water cleaning, pipeline inspection and coating services, large tank and surface impoundment cleaning, oilfield transport, daylighting, production services and upstream energy services, such as exploration and drilling for industrial oil and gas customers. Services are provided based on purchase orders or agreements with the customer and include prices based upon daily, hourly or job rates for equipment, materials and personnel. The Company recognizes revenue for these services over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred.

The Company's Safety-Kleen operating segment generally has the following two sources of revenue:

Safety-Kleen Environmental Services—Safety-Kleen Environmental Services revenues are generated from providing parts washer services, containerized waste handling and disposal services, oil collection services, vacuum services, direct sales of blended oil products and other complementary services and product sales. Containerized waste services consist of profiling, collecting, transporting and recycling or disposing of a wide variety of waste. Other products and services include sale of complementary supply products including automotive fluids and shop supplies and other environmental services. Parts washer services include customer use of our parts washer equipment, cleaning and maintenance of the parts washer equipment and removal and replacement of used cleaning fluids. Parts washer services are considered a single performance obligation due to the highly integrated and interdependent nature of the arrangement. Revenue from parts washer services is recognized over the service interval as the customer receives the benefit of the services. Collection and transportation revenues are recognized over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred. Product revenue is recognized upon the transfer of control whereby control transfers when the products are delivered to the customer.

Safety-Kleen Oil—Revenues from Safety-Kleen Oil are generated from sales of high-quality base and blended lubricating oils to third-party distributors, government agencies, fleets, railroads and industrial customers. The business also sells recycled fuel oil to asphalt plants, industrial plants and pulp and paper companies. The used oil is also processed into vacuum gas oil which can be further re-refined into lubricant base oils or sold directly into the marine diesel oil fuel market. Revenue for oil products is recognized at a point in time, upon the transfer of control. Control transfers when the products are delivered to the customer.

Foreign Currency

The Company has international operations, substantially all of which are located in Canada from an operational perspective with more limited administrative support services located in India. The functional currencies of foreign operations are the local currency and therefore assets and liabilities of those foreign operations are translated to U.S. Dollars at the exchange rate in effect at the balance sheet date and revenue and expenses at the average exchange rate for the period. Gains and losses from the translation of the consolidated financial statements of foreign subsidiaries into U.S. Dollars are included in stockholders' equity as a component of accumulated other comprehensive loss. Gains and losses from transactions not denominated in the functional currency of an entity are recognized in the consolidated statements of operations. Recorded balances that are denominated in a currency other than the functional currency are remeasured to the functional currency using the exchange rate at the balance sheet date and gains or losses are recorded in the consolidated statements of operations.

Advertising Expense

Advertising costs are expensed as incurred. Advertising expense was $9.0 million in 2020, $9.8 million in 2019 and $10.5 million in 2018.

Government Grants

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law in response to the widespread economic impact of the COVID-19 pandemic, providing companies, among other things, tax credits for a portion of wages paid to qualifying employees. Additionally, the Canadian government enacted the Canada Emergency Wage Subsidy ("CEWS") to help employers offset a portion of their employee wages.

During the year ended December 31, 2020, the Company recorded a benefit of $42.3 million as an offset to the related operating expenses in either cost of revenues or selling, general and administrative expenses for the eligible employee retention credit under the CARES Act and the subsidy under CEWS, as amended. The benefits received under these government sponsored programs do not require repayment.

Stock-Based Compensation

Stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which generally represents the vesting period. In addition, the Company issues awards with performance targets established at the grant date. The expense for these awards is recognized over the requisite service period when management believes it is probable those performance targets will be achieved. The fair value of the Company's grants are based on the closing price of the Company's common stock on the respective dates of grant. Forfeitures are recognized as they occur. Stock-based compensation is recognized in selling, general and administrative expense.

Income Taxes

Current income tax expense approximates cash to be paid or refunded for taxes for the applicable period. Deferred tax expense or benefit is the result of changes between deferred tax assets and liabilities. Deferred tax assets and liabilities are determined based upon the temporary differences between the financial statement basis and tax basis of assets and liabilities as well as from net operating loss and tax credit carryforwards as measured by the enacted tax rates which will be in effect when these differences reverse. The effect of a change in tax rates on deferred tax assets and liabilities is generally recognized in income in the period that includes the enactment date. The Company evaluates the recoverability of future tax deductions and credits and a valuation allowance is established by tax jurisdiction when, based on an evaluation of both positive and negative objective verifiable evidence, it is more likely than not that some portion or all of deferred tax assets will not be realized.

The Company recognizes and measures a tax benefit from uncertain tax positions when it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the position. The Company recognizes a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company adjusts these liabilities when its judgment changes as a result of the evaluation of new information not previously available. Due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from the current estimate or future recognition of an unrecognized benefit. These differences will be reflected as increases or decreases to income tax expense in the period in which they are determined. Liabilities for unrecognized tax benefits are included within other long-term liabilities in the consolidated balance sheets.

The Company recognizes interest and penalties related to unrecognized tax benefits within the provision for income taxes line in the consolidated statements of operations. Accrued interest and penalties are included within the other long-term liabilities line in the consolidated balance sheet.

Earnings per Share ("EPS")

Basic EPS is calculated by dividing net income by the weighted average number of common shares outstanding during the period. Diluted EPS gives effect to all potentially dilutive common shares that were outstanding during the period.

Leases

The Company’s leases predominately relate to real estate, equipment, such as vehicles and industrial equipment utilized in operations, and rail cars utilized in connection with the Company’s transportation needs. Contracts are reviewed at inception to determine if the arrangement is a lease and, if so, whether it is an operating or finance lease. For all of its leases, the Company has elected not to separate lease and nonlease components, such as common area maintenance.

The Company generally enters into long-term real estate leases with three to ten-year terms and long-term non-real estate leases with two to eight-year terms. In the normal course of business, the Company also enters into short-term leases having terms of less than one-year. These leases are generally equipment leases entered into for short periods of time (e.g. daily, weekly or monthly) to satisfy immediate and/or short-term operational needs of the business which can arise based upon the nature of particular services performed or seasonality factors. The Company has elected not to recognize right of use ("ROU") assets and lease liabilities for these short-term leases. Expense for all such short-term leases is disclosed as short-term lease cost as shown in Note 18, "Leases."

Operating and finance leases with terms exceeding one year are recognized as ROU assets and lease liabilities and measured based on the present value of the future lease payments over the lease term at commencement date. When applicable, the ROU asset includes any lease payments made at or before the commencement date and initial direct costs incurred and is reduced by lease incentives received under the lease agreement.

Certain of the Company's real estate leases contain escalating future lease payments. Escalating lease payments that are based upon explicit amounts contained in the lease or an index (e.g., consumer price index) are included in its determination of future lease payments to determine the ROU asset and lease liability recognized at the commencement date. Any differences in the future lease payments from initial recognition are not anticipated to be material and will be recorded as variable lease cost in the period incurred. The variable lease cost will also include the Company’s portion of property tax, utilities and common area maintenance. A significant portion of the Company’s real estate lease agreements include renewal periods at the Company’s option. The Company includes these renewal periods in the lease term only when renewal is reasonably certain based upon facts and circumstances specific to the lease and known by the Company. Certain of the equipment and rail car leases transfer ownership upon the conclusion of the lease term and as such, are classified as finance leases. Leases containing purchase options are classified as finance leases only when it is reasonably certain that the Company will execute such options.

The Company uses its incremental borrowing rate on collateralized debt based on the information available at the lease commencement date in determining the present value of future lease payments as the implicit rate is typically not readily determinable.

For operating leases, lease cost is recognized on a straight-line basis over the lease term and is included in cost of revenues or selling, general and administrative expenses depending on the use of the asset. For finance leases, ROU assets are amortized on a straight-line basis over the shorter of the lease term or the estimated useful life of the leased asset and interest expense is recognized based on the incremental borrowing rate. Amortization and interest expense for finance leases are included in depreciation and amortization and interest expense, net of interest income, respectively.

The Company adopted Accounting Standards Codification 842, *Leases ("ASC 842")*, on January 1, 2019 using the modified retrospective method of adoption. Prior period amounts have not been adjusted and continue to be reported in accordance with the Company's historical accounting methodology pursuant to Accounting Standards Codification 840, *Leases*. The standard did not have a material impact on the consolidated statements of operations or cash flows.

(3) REVENUES

Disaggregation of Revenue

We disaggregate the Company’s third-party revenues by geographic location and source of revenue as we believe these categories depict how revenue and cash flows are affected by economic factors (in thousands):

	For the year ended December 31, 2020			
	Environmental Services	Safety-Kleen	Corporate	Total
Primary Geographical Markets				
United States	$ 1,690,256	$ 1,049,975	$ (674)	$ 2,739,557
Canada	313,825	89,751	964	404,540
Total third-party revenues	$ 2,004,081	$ 1,139,726	$ 290	$ 3,144,097
Sources of Revenue [(1)]				
Technical Services	$ 1,062,714	$ —	$ —	$ 1,062,714
Field and Emergency Response Services	461,036	—	—	461,036
Industrial Services and Other	480,331	—	290	480,621
Safety-Kleen Environmental Services	—	809,236	—	809,236
Safety-Kleen Oil	—	330,490	—	330,490
Total third-party revenues	$ 2,004,081	$ 1,139,726	$ 290	$ 3,144,097

CLEAN HARBORS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	For the year ended December 31, 2019			
	Environmental Services	Safety-Kleen	Corporate	Total
Primary Geographical Markets				
United States	$ 1,721,322	$ 1,220,096	$ (586)	$ 2,940,832
Canada	371,041	98,595	1,722	471,358
Total third-party revenues	$ 2,092,363	$ 1,318,691	$ 1,136	$ 3,412,190
Sources of Revenue [1]				
Technical Services	$ 1,120,043	$ —	$ —	$ 1,120,043
Field and Emergency Response Services	340,906	—	—	340,906
Industrial Services and Other [2]	631,414	—	1,136	632,550
Safety-Kleen Environmental Services	—	851,520	—	851,520
Safety-Kleen Oil	—	467,171	—	467,171
Total third-party revenues	$ 2,092,363	$ 1,318,691	$ 1,136	$ 3,412,190

	For the year ended December 31, 2018			
	Environmental Services	Safety-Kleen	Corporate	Total
Primary Geographical Markets				
United States	$ 1,598,402	$ 1,196,661	$ 1,082	$ 2,796,145
Canada	405,441	98,694	23	504,158
Total third-party revenues	$ 2,003,843	$ 1,295,355	$ 1,105	$ 3,300,303
Sources of Revenue [1]				
Technical Services	$ 1,037,388	$ —	$ —	$ 1,037,388
Field and Emergency Response Services	304,727	—	—	304,727
Industrial Services and Other [3]	661,728	—	1,105	662,833
Safety-Kleen Environmental Services	—	795,077	—	795,077
Safety-Kleen Oil	—	500,278	—	500,278
Total third-party revenues	$ 2,003,843	$ 1,295,355	$ 1,105	$ 3,300,303

(1) All revenue except oil and oil product sales within Safety-Kleen Oil and product sales within Safety-Kleen Environmental Services, which include various automotive related fluids, shop supplies and direct blended oil sales, are recognized over time. Safety-Kleen Oil and Safety-Kleen Environmental Services product sales are recognized at a point in time.

(2) Environmental Services third-party revenues of $117.0 million and Corporate third party revenues of $1.1 million previously reported as Oil, Gas and Lodging Services and Other for the year ended December 31, 2019 are now reported within Industrial Services and Other based on relative materiality to the business.

(3) Environmental Services third-party revenues of $119.8 million and Corporate third party revenues of $1.1 million previously reported as Oil, Gas and Lodging Services and Other for the year ended December 31, 2018 are now reported within Industrial Services and Other based on relative materiality to the business.

Contract Balances

(in thousands)	December 31, 2020	December 31, 2019
Receivables	$ 611,534	$ 644,738
Contract assets (unbilled receivables)	55,681	56,326
Contract liabilities (deferred revenue)	74,066	73,370

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets) and customer advances and deposits or deferred revenue (contract liabilities) on the consolidated balance sheet. Generally, billing occurs subsequent to revenue recognition, as a right to payment is not just subject to passage of time, resulting in contract assets. Contract assets are generally classified as current. The Company sometimes receives advances or deposits from its customers before revenue is recognized, resulting in contract liabilities. These assets and liabilities are reported on the consolidated balance sheet on a contract-by-contract basis at the end of each reporting period. The contract liability balances at the beginning of each period presented were generally fully recognized in the subsequent three-month period.

Variable Consideration

The nature of the Company's contracts give rise to certain types of variable consideration, including in limited cases volume discounts. Accordingly, management establishes a revenue allowance to cover the estimated amounts of revenue that may need to be credited to customers' accounts in future periods. The Company estimates the amount of variable consideration to include in the estimated transaction price based on historical experience, anticipated performance and management's best judgment at the time and to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved.

Contract Costs

Contract costs include direct and incremental costs to obtain or fulfill a contract. Parts washer costs include costs of solvent, commissions paid relating to revenue generated from parts washer services, and transportation costs associated with transferring the product picked up from the services as it is returned to the Company’s facilities or a third-party site. Costs related to the treatment of waste include costs for waste receiving, drum movement and storage, waste consolidation and transportation between facilities.

The Company’s contract costs that are subject to capitalization are comprised of costs associated with parts washer services and costs associated with the treatment and disposal of waste. As of December 31, 2020 and 2019, the Company's deferred contract costs totaled $22.8 million and $21.7 million, respectively. Deferred parts washer costs are recognized over the service interval as the customer receives the benefit of the services, and deferred costs related to treatment and disposal of waste are recognized when the corresponding waste is disposed. Deferred costs are included within total current assets in the Company’s consolidated balance sheets. The deferred contract cost balances at the beginning of each period presented were fully recognized in cost of revenue in the subsequent three-month period.

(4) BUSINESS COMBINATIONS

2020 Acquisition

On April 17, 2020, the Company acquired a privately-owned business for $8.8 million cash consideration. The acquired company expands the Safety-Kleen segment's oil re-refining operations to the northeast United States. In connection with this acquisition, a preliminary goodwill amount of $1.4 million was recognized. The results of operations of this acquired business were not material in 2020.

2019 Acquisitions

On May 31, 2019, the Company acquired a privately-owned business for $14.8 million cash consideration. The acquired company expands the environmental services and hazardous materials management services of the Company and is included in the Environmental Services segment. In connection with this acquisition, a goodwill amount of $7.4 million was recognized.

On March 1, 2019, the Company acquired certain assets of a privately-owned business for $10.4 million cash consideration. The acquired business complements the Safety-Kleen segment's core service offerings, such as used motor oil collection, parts washers, oil filter recycling and vacuum services. In connection with this acquisition, a goodwill amount of $5.2 million was recognized.

The results of operations of these acquired businesses were not material in 2019. Pro forma revenue and earnings amounts on a combined basis as if these acquisitions had been completed on January 1, 2018 are immaterial to the consolidated financial statements of the Company since that date.

2018 Acquisitions

On August 31, 2018, the Company acquired a privately-owned company which expands the environmental services and waste oil capabilities of the Company for a $26.7 million purchase price, net of cash. The results of operations of this acquired business were not material in 2018.

CLEAN HARBORS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On February 23, 2018, the Company completed the acquisition of the U.S. Industrial Cleaning Business of Veolia Environmental Services North America LLC (the "Veolia Business"). The acquisition provides significant scale and industrial services capabilities while increasing the size of the Company's existing U.S. Industrial Services business. The Company acquired the Veolia Business for a purchase price of $124.5 million. The Veolia Business has been integrated into the Environmental Services segment. The amount of revenue from the Veolia Business included in the Company's results of operations for the year ended December 31, 2018 was $154.0 million. The amount of pre-tax loss from the Veolia Business included in the Company's results of operations for the year ended December 31, 2018 was $0.9 million, which included $14.6 million in depreciation expense as well as $0.6 million of amortization expense related to intangible assets. During the year ended December 31, 2018, the Company incurred acquisition-related costs of approximately $1.4 million in connection with the transaction which are included in selling, general and administrative expenses in the consolidated statements of operations.

(5) INVENTORIES AND SUPPLIES

Inventories and supplies consisted of the following (in thousands):

	December 31, 2020	December 31, 2019
Oil and oil related products	$ 76,209	$ 75,408
Supplies and drums	120,007	115,128
Solvent and solutions	8,812	9,973
Other	15,470	14,235
Total inventories and supplies	$ 220,498	$ 214,744

Supplies and drums inventories consist primarily of drums and containers used in providing the Company's products and services, critical spare parts to support the Company's incinerator and re-refinery operations, and personal protective equipment. Other inventories consist primarily of parts washer components, cleaning fluids, absorbents and automotive fluids, such as windshield washer fluid and antifreeze.

(6) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following (in thousands):

	December 31, 2020	December 31, 2019
Land	$ 139,776	$ 131,023
Asset retirement costs (non-landfill)	16,407	15,924
Landfill assets	191,687	182,276
Buildings and improvements (1)	509,804	499,159
Camp equipment	159,021	158,277
Vehicles (2)	844,026	785,056
Equipment (3)	1,807,235	1,779,366
Furniture and fixtures	7,082	6,054
Construction in progress	24,378	36,679
	3,699,416	3,593,814
Less - accumulated depreciation and amortization	2,174,118	2,005,663
Total property, plant and equipment, net	$ 1,525,298	$ 1,588,151

(1) Balances inclusive of gross ROU assets classified as finance leases of $8.9 million and $31.0 million, respectively.
(2) Balances inclusive of gross ROU assets classified as finance leases of $47.2 million and $2.4 million, respectively.
(3) December 31, 2020 balance inclusive of gross ROU assets classified as finance leases of $9.3 million.

Depreciation expense, inclusive of landfill and finance lease amortization was $257.1 million, $265.5 million and $264.3 million for the years ended December 31, 2020, 2019 and 2018, respectively.

(7) GOODWILL AND OTHER INTANGIBLE ASSETS

The changes in goodwill for the years ended December 31, 2020 and 2019 were as follows (in thousands):

	Environmental Services	Safety-Kleen	Totals
Balance at January 1, 2019	$ 207,019	$ 307,170	$ 514,189
Increase from current period acquisitions	7,378	5,225	12,603
Measurement period adjustments from prior period acquisitions	(2,675)	(1,355)	(4,030)
Foreign currency translation	809	1,442	2,251
Balance at December 31, 2019	$ 212,531	$ 312,482	$ 525,013
Increase from current period acquisition	—	1,439	1,439
Measurement period adjustments from prior period acquisitions	23	—	23
Decrease from disposition of businesses	(674)	—	(674)
Foreign currency translation	506	716	1,222
Balance at December 31, 2020	$ 212,386	$ 314,637	$ 527,023

The Company regularly assesses goodwill for impairment when it is more likely than not that events or changes in the business environment ("triggering events") would reduce the fair value of a reporting unit below its carrying value. The Company considered the effects of COVID-19 and evolving changes in demand and pricing for oil during 2020 but concluded that there were no triggering events requiring an impairment assessment.

Goodwill impairment is also tested annually. The Company conducted its annual impairment test of goodwill as of December 31, 2020 and determined that no adjustment to the carrying value of goodwill for any reporting unit was then necessary because the fair values of the reporting units exceeded their respective carrying values. The fair value of all reporting units was determined using an income approach based upon estimates of future discounted cash flows. The resulting estimates of fair value were validated through the consideration of other factors such as the fair value of comparable companies to the reporting units and a reconciliation of the sum of all estimated fair values of the reporting units to the Company’s overall market capitalization. In all cases, the estimated fair values of the reporting units significantly exceeded the respective carrying values.

Significant judgments and unobservable inputs categorized as Level 3 in the fair value hierarchy are inherent in the impairment tests performed and include assumptions about the amount and timing of expected future cash flows, growth rates, and the determination of appropriate discount rates. Level 3 inputs are unobservable inputs for the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date. The Company believes that the assumptions used in its impairment tests are reasonable, but variations in any of the assumptions may result in different measurements of fair values.

The impacts of any adverse business and market conditions which may impact the overall performance of the Company's reporting units will continue to be monitored. If the Company's reporting units do not achieve the financial performance that the Company expects, or if the impact of the COVID-19 pandemic and macroeconomic factors on the Company and its customers result in significant prolonged changes in demand for our products and services, it is possible that goodwill impairment charges may result. There can therefore be no assurance that future events will not result in an impairment of goodwill.

As of December 31, 2020 and 2019, the Company's finite-lived and indefinite-lived intangible assets consisted of the following (in thousands):

	December 31, 2020			December 31, 2019		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
Permits	$ 183,766	$ 95,033	$ 88,733	$ 184,235	$ 87,228	$ 97,007
Customer and supplier relationships	382,083	211,895	170,188	401,696	207,884	193,812
Other intangible assets	39,287	34,744	4,543	38,331	33,018	5,313
Total amortizable permits and other intangible assets	605,136	341,672	263,464	624,262	328,130	296,132
Trademarks and trade names	123,156	—	123,156	122,934	—	122,934
Total permits and other intangible assets	$ 728,292	$ 341,672	$ 386,620	$ 747,196	$ 328,130	$ 419,066

The Company regularly monitors and assesses whether events or changes in circumstances relative to the Company's business might indicate that future cash flows attributable to the Company's asset groups may not be sufficient to recover the current value of those assets. During the periods presented, there were no events or changes in circumstances which would indicate that the carrying values of the Company's asset groups would not be recoverable and thus no impairment charge was recorded related to the Company's long-lived assets. If expectations of future cash flows were to decrease in the future as a result of worse than expected or prolonged periods of depressed activity, including prolonged macroeconomic impacts from the COVID-19 pandemic as noted above, future impairments may become evident.

Amortization expense of permits and other intangible assets for the years ended December 31, 2020, 2019 and 2018 were $35.8 million, $35.2 million and $34.4 million, respectively.

The expected amortization of the net carrying amount of finite-lived intangible assets at December 31, 2020 is as follows (in thousands):

Years ending December 31,	Expected Amortization
2021	$ 30,163
2022	29,911
2023	25,587
2024	24,092
2025	23,121
Thereafter	130,590
	$ 263,464

(8) ACCRUED EXPENSES

Accrued expenses consisted of the following (in thousands):

	December 31, 2020	December 31, 2019
Accrued insurance	$ 77,514	$ 74,376
Accrued interest	19,697	21,222
Accrued compensation and benefits	81,437	72,473
Accrued income, real estate, sales and other taxes	25,843	35,749
Interest rate swap liability	33,630	20,840
Accrued other	57,702	51,880
	$ 295,823	$ 276,540

As of December 31, 2020 and 2019, accrued insurance included employee medical insurance costs of $9.4 million and $14.3 million, respectively, and accruals for losses under our workers' compensation, comprehensive general liability and vehicle liability self-insurance programs of $65.6 million and $59.4 million, respectively.

Accrued compensation and benefits increased from the comparable period in 2019 primarily due to an increase in payroll tax payable of $17.0 million due to the deferral of employer payroll tax payments under the CARES Act which are due to be repaid in the fourth quarter of 2021. This increase was partially offset by decreases in accrued payroll of $4.8 million and accrued bonuses of $3.5 million.

The increase in the fair value of the interest rate swap liability from December 31, 2019 is mainly due to changes in variable interest rates. For additional information relating to the derivative liability, see Note 11, "Financing Arrangements."

(9) CLOSURE AND POST-CLOSURE LIABILITIES

The changes to closure and post-closure liabilities (also referred to as "asset retirement obligations") from January 1, 2019 through December 31, 2020 were as follows (in thousands):

	Landfill Retirement Liability	Non-Landfill Retirement Liability	Total
Balance at January 1, 2019	$ 37,809	$ 32,122	$ 69,931
Liabilities assumed in acquisitions	—	220	220
New asset retirement obligations	2,705	—	2,705
Accretion	2,772	2,829	5,601
Changes in estimates recorded to consolidated statement of operations	248	2,437	2,685
Changes in estimates recorded to consolidated balance sheet	3,303	562	3,865
Expenditures	(7,718)	(2,121)	(9,839)
Currency translation and other	282	201	483
Balance at December 31, 2019	39,401	36,250	75,651
Liabilities assumed in acquisitions	—	265	265
New asset retirement obligations	2,101	—	2,101
Accretion	3,254	3,399	6,653
Changes in estimates recorded to consolidated statement of operations	6,465	103	6,568
Changes in estimates recorded to consolidated balance sheet	481	201	682
Expenditures	(3,445)	(753)	(4,198)
Currency translation and other	155	49	204
Balance at December 31, 2020	$ 48,412	$ 39,514	$ 87,926

During 2020, the Company took actions to begin the closure of two of its commercial landfill sites. The Altair landfill was closed because it had reached permitted capacity. The Westmorland landfill was closed due to the costs of obtaining and maintaining permits and operating the landfill. The 2020 environmental changes in estimates recorded to the consolidated statement of operations included $6.8 million related to the closure of these two commercial landfills. The 2019 environmental changes in estimates recorded to the consolidated statements of operations included $2.3 million related to increased facility closure costs at one of our locations.

Anticipated payments (based on current estimated costs and anticipated timing of necessary regulatory approvals to commence work on closure and post-closure activities) for each of the next five years and thereafter are as follows (in thousands):

Year ending December 31,	
2021	$ 14,941
2022	7,816
2023	16,181
2024	6,868
2025	5,628
Thereafter	269,477
Undiscounted closure and post-closure liabilities	320,911
Less: Discount at credit-adjusted risk-free rate	(159,164)
Less: Undiscounted estimated closure and post-closure liabilities relating to airspace not yet consumed	(73,821)
Present value of closure and post-closure liabilities	$ 87,926

(10) REMEDIAL LIABILITIES

The changes to remedial liabilities from January 1, 2019 through December 31, 2020 were as follows (in thousands):

	Remedial Liabilities for Landfill Sites	Remedial Liabilities for Inactive Sites	Remedial Liabilities (Including Superfund) for Non-Landfill Operations	Total
Balance at January 1, 2019	$ 1,838	$ 65,315	$ 53,864	$ 121,017
Accretion	88	2,639	1,808	4,535
Changes in estimates recorded to consolidated statement of operations	(17)	(913)	(2,087)	(3,017)
Expenditures	(59)	(5,079)	(3,724)	(8,862)
Currency translation and other	1	29	470	500
Balance at December 31, 2019	1,851	61,991	50,331	114,173
Accretion	90	2,607	1,701	4,398
Changes in estimates recorded to consolidated statement of operations	(15)	2,873	1,272	4,130
Expenditures	(61)	(4,332)	(3,810)	(8,203)
Currency translation and other	—	(79)	394	315
Balance at December 31, 2020	$ 1,865	$ 63,060	$ 49,888	$ 114,813

During 2020, the Company increased its remedial liabilities for an inactive site and a Superfund site by $3.3 million and $1.8 million, respectively, due to updated regulatory remediation requirements received during the year. In 2019, the net reduction in the Company's remedial liabilities from changes in estimates recorded to the consolidated statement of operations was $3.0 million and primarily related to reductions in estimates for remedial activities at five locations.

Anticipated payments at December 31, 2020 (based on current estimated costs and anticipated timing of necessary regulatory approvals to commence work on remedial activities) for each of the next five years and thereafter were as follows (in thousands):

Year ending December 31,		
2021	$	12,718
2022		19,275
2023		11,420
2024		9,073
2025		6,526
Thereafter		75,915
Undiscounted remedial liabilities		134,927
Less: Discount		(20,114)
Total remedial liabilities	$	114,813

The following tables show, respectively, (i) the amounts of such estimated liabilities associated with the types of facilities and sites involved and (ii) the amounts of such estimated liabilities associated with each facility or site which represents at least 5% of the total and with all other facilities and sites as a group and as of December 31, 2020.

Estimates based on type of facility or site (in thousands, except percentages):

Type of Facility or Site	Remedial Liability	% of Total	Reasonably Possible Additional Liabilities [(1)]
Facilities now used in active conduct of the Company's business (37 facilities)	$ 42,151	36.7 %	$ 10,565
Inactive facilities not now used in active conduct of the Company's business but most of which were acquired because the assumption of remedial liabilities for such facilities was part of the purchase price for the CSD assets (27 facilities)	63,060	54.9	10,716
Superfund sites (16 sites)	9,602	8.4	960
Total	$ 114,813	100.0 %	$ 22,241

(1) Amounts represent the high end of the range of management's best estimate of the reasonably possible additional liabilities.

Estimates based on amount of potential liability (in thousands, except percentages):

Location	Type of Facility or Site	Remedial Liability[1]	% of Total	Reasonably Possible Additional Liabilities[2]
Baton Rouge, LA	Closed incinerator and landfill	$ 25,650	22.3 %	$ 4,208
Bridgeport, NJ	Closed incinerator	17,832	15.5	2,510
Mercier, Quebec	Idled incinerator and legal proceedings	11,158	9.7	1,157
Linden, NJ	Operating solvent recycling center	7,220	6.3	758
Various	All other incinerators, landfills, wastewater treatment facilities and service centers (60 facilities)	43,351	37.8	12,648
Various	Superfund sites (each representing less than 5% of total liabilities) (16 sites)	9,602	8.4	960
Total		$ 114,813	100.0 %	$ 22,241

(1) $24.0 million of the $114.8 million remedial liabilities include estimates related to the legal and administrative proceedings discussed in Note 17, "Commitments and Contingencies," as well as other such estimated remedial liabilities.
(2) Amounts represent the high end of the range of management's best estimate of the reasonably possible additional liabilities.

Revisions to remediation reserve requirements may result in upward or downward adjustments to income from operations in any given period. The Company believes that its extensive experience in the environmental services business, as well as its involvement with a large number of sites, provides a reasonable basis for estimating its aggregate liability. It is possible, however, that future changes in available technology, regulatory or enforcement developments, the results of environmental studies or other factors could necessitate the recording of additional liabilities or the revision of currently recorded liabilities that could be material. Since the Company's satisfaction of the liabilities will occur over many years, the Company cannot reasonably predict the nature or extent of possible future events or the impact that those events, if any, might have on the current estimates of remedial liabilities.

(11) FINANCING ARRANGEMENTS

The following table is a summary of the Company's financing arrangements (in thousands):

Current Debt:	December 31, 2020	December 31, 2019
Secured senior term loans ("Term Loans")	$ 7,535	$ 7,535
Long-Term Debt:		
Secured senior Term Loans due June 30, 2024	$ 719,626	$ 727,162
Unsecured senior notes, at 4.875%, due July 15, 2027 ("2027 Notes")	545,000	545,000
Unsecured senior notes, at 5.125%, due July 15, 2029 ("2029 Notes")	300,000	300,000
Long-term debt, at par	1,564,626	1,572,162
Unamortized debt issuance costs and premium, net	(14,985)	(18,046)
Long-term debt, at carrying value	$ 1,549,641	$ 1,554,116

Financing Activities

Unsecured Senior Notes. On July 2, 2019, the Company completed a private placement of $545.0 million aggregate principal amount of 2027 Notes and $300.0 million aggregate principal amount of 2029 Notes (collectively, the "Notes"). The 2027 Notes will mature on July 15, 2027, and the 2029 Notes will mature on July 15, 2029. Interest payments on each series of the Notes are paid semiannually on January 15 and July 15.

The Company may redeem all or any portion of the 2027 Notes prior to July 15, 2022 or the 2029 Notes prior to July 15, 2024 at a redemption price equal to 100% of the principal amount redeemed plus a make whole premium as of the date of redemption including accrued and unpaid interest, if any, up to the date of redemption. Additionally, prior to July 15, 2022 for the 2027 Notes and July 15, 2024 for the 2029 Notes, the Company may use cash proceeds of one or more equity offerings to redeem up to 35% in aggregate principal of the 2027 Notes or the 2029 Notes at a redemption price equal to 104.875% or 105.125%, respectively, plus accrued and unpaid interest thereon, if any, up to the date of redemption.

After the dates in the preceding paragraph, the Company may redeem all or any portion of the Notes which remain outstanding at any time upon proper notice at the following redemption prices if redeemed during the twelve-month period commencing on July 15 of the years set forth below plus accrued and unpaid interest, if any, up to the date of redemption:

2027 Notes

Year	Percentage
2022	102.438 %
2023	101.219 %
2024 and thereafter	100.000 %

2029 Notes

Year	Percentage
2024	102.563 %
2025	101.281 %
2026 and thereafter	100.000 %

Concurrently with the closing of the Notes in July 2019, the Company repurchased an aggregate principal amount of $845.0 million of previously outstanding notes due in 2021 ("2021 Notes") using a combination of the net proceeds from the sale of the Notes and available cash. The total amount paid in repurchasing the 2021 Notes was $850.2 million, including $4.0 million of accrued interest. In connection with this repurchase of the 2021 Notes, the Company recorded a loss on early extinguishment of debt of $6.1 million during the year ended December 31, 2019.

The Notes and the related indenture contain various customary non-financial covenants and are guaranteed by substantially all of the Company's current and future domestic subsidiaries. The Notes are effectively subordinated to the loan agreement under which the Company's Term Loans are outstanding, revolving credit facility and finance lease obligations to the extent of the value of the assets securing such secured indebtedness. The Notes are also effectively subordinated to all indebtedness and other liabilities of the Company's subsidiaries that are not guarantors of the Notes.

Senior Secured Term Loans. On July 19, 2018, the Company, and substantially all of the Company's domestic subsidiaries as guarantors, entered into an Incremental Facility Amendment (the "Incremental Facility Amendment") to the Company's Term Loans. The Incremental Facility Amendment increased the principal amount of the Term Loans outstanding by $350.0 million. The total Term Loans outstanding will mature on June 30, 2024 and may be prepaid at any time without premium or penalty other than customary breakage costs with respect to Eurodollar based loans. The Company's obligations under the Term Loans are guaranteed by all of the Company's domestic restricted subsidiaries and secured by liens on substantially all of the assets of the Company and the guarantors. The applicable interest rate margins for the Term Loans are 1.75% for Eurocurrency borrowings and 0.75% for base rate borrowings. The effective annual interest rate of the Term Loans on December 31, 2020 was 1.90%.

Concurrently with the closing on July 19, 2018 of the Incremental Facility Amendment, the Company repurchased $322.0 million aggregate principal of previously outstanding unsecured senior notes. The total amount paid to repurchase those notes was $330.9 million inclusive of $7.9 million of accrued interest and $1.0 million of debt redemption fees. On August 1, 2018, the Company redeemed the remaining $78.0 million of principal of those previously outstanding notes. In connection with this redemption, the Company recorded a loss on early extinguishment of debt of $2.5 million during the year ended December 31, 2018.

As of December 31, 2020 and December 31, 2019, the estimated fair value of the Company's outstanding long-term debt, including the current portion, was $1.6 billion. The Company's estimates of the fair value of its long-term debt, including the current portion, are based on quoted market prices or other available market data which are considered Level 2 measures according to the fair value hierarchy. Level 2 utilizes quoted market prices in markets that are not active, broker or dealer quotation, or alternative pricing sources with reasonable levels of price transparency for similar assets and liabilities.

Revolving Credit Facility. On October 28, 2020, the Company and one of the Company's subsidiaries (the "Canadian Borrower") entered into an amended and restated credit agreement for the Company's revolving credit facility with Bank of

America, N.A. (“BofA”), as agent for the lenders under the facility (the "Agent"). Under the amended and restated facility, the Company has the right to obtain revolving loans and letters of credit for a combined maximum of up to $350.0 million (with a sub-limit of $250.0 million for letters of credit) and the Canadian Borrower has the right to obtain revolving loans and letters of credit for a combined maximum of up to $50.0 million. Availability under the U.S. line is subject to a borrowing base primarily comprised of 85% of the eligible accounts receivable of the Company and its U.S. subsidiaries plus 100% of cash deposited in a controlled account with the Agent, and availability under the Canadian line is subject to a borrowing base primarily comprised of 85% of the eligible accounts receivable of the Company’s Canadian subsidiaries plus 100% of cash deposited in a controlled account with the Agent’s Canadian affiliate. Subject to certain conditions, the revolving credit facility will expire on October 28, 2025.

Borrowings under the revolving credit facility bear interest at a rate of, at the Company’s option, either (i) LIBOR plus an applicable margin ranging from 1.50% to 1.75% per annum based primarily on the level of the Company’s average liquidity for the most recent 30 day period or (ii) BofA’s base rate plus an applicable margin ranging from 0.50% to 0.75% per annum based primarily on such average liquidity. There is also an unused line fee, calculated on the then unused portion of the lenders’ $400.0 million maximum commitments, ranging from 0.25% to 0.375% per annum of the unused commitment. For outstanding letters of credit, the Company pays to the lenders a fee equal to the then applicable LIBOR margin described above, and to the issuing banks a standard fronting fee and customary fees and charges in connection with all amendments, extensions, draws and other actions with respect to letters of credit. In the event that LIBOR ceases to be available during the term of the revolving credit facility, the amended and restated credit agreement provides procedures to determine a LIBOR successor rate.

The Company utilizes letters of credit issued under the revolving credit facility primarily as security for our insurance program that includes casualty and financial assurance.

The Company’s obligations under the revolving credit facility (including revolving loans and reimbursement obligations for outstanding letters of credit) are guaranteed by substantially all of the Company’s U.S. subsidiaries and secured by a first lien on the Company’s and its U.S. subsidiaries’ accounts receivable. The Canadian Borrower’s obligations under the facility are guaranteed by substantially all of the Company’s Canadian subsidiaries and secured by a first lien on the accounts receivable of the Canadian subsidiaries.

On March 31, 2020, the Company borrowed $150.0 million under the revolving credit facility. The Company repaid the full amount of the borrowing during 2020. The revolving credit facility had no outstanding loan balances at December 31, 2020 and 2019 and had availability of $264.0 million and outstanding letters of credit of $120.6 million at December 31, 2020.

Cash Flow Hedges

The Company’s strategy to hedge against fluctuations in variable interest rates involves entering into interest rate derivative agreements.

Although the interest rate on the Term Loans is variable, the Company has effectively fixed the interest rate on $350.0 million principal outstanding by entering into interest rate swap agreements in 2018 with a notional amount of $350.0 million. Under the terms of the interest rate swap agreements, the Company receives interest based on the one-month LIBOR index and pays interest at a weighted average rate of approximately 2.92%, resulting in an effective annual interest rate of approximately 4.67%.

The Company recognizes derivative instruments as either assets or liabilities on the consolidated balance sheet at fair value. No ineffectiveness has been identified on these swaps and, therefore the change in fair value is recorded in stockholders’ equity as a component of accumulated other comprehensive loss. Amounts are reclassified from accumulated other comprehensive loss into interest expense on the consolidated statement of operations in the same period or periods during which the hedged transactions affect earnings.

As of December 31, 2020 and December 31, 2019, the Company recorded a derivative liability with a fair value of $33.6 million and $20.8 million, respectively, within accrued expenses in connection with these cash flow hedges.

The fair value of the interest rate swaps is calculated using discounted cash flow valuation methodologies based upon the one-month LIBOR yield curves that are observable at commonly quoted intervals for the full term of the interest rate swaps and as such is considered a Level 2 measure according to the fair value hierarchy.

(12) INCOME TAXES

The domestic and foreign components of income before provision for income taxes were as follows (in thousands):

	For the years ended December 31,		
	2020	2019	2018
Domestic	$ 168,117	$ 156,571	$ 115,070
Foreign	6,433	(8,332)	(20,588)
Total	$ 174,550	$ 148,239	$ 94,482

The provision for income taxes consisted of the following (in thousands, except percentages):

	For the years ended December 31,		
	2020	2019	2018
Current:			
Federal	$ 33,327	$ 20,482	$ (7,677)
State	14,575	14,564	12,653
Foreign	1,559	7,448	4,781
	49,461	42,494	9,757
Deferred			
Federal	(965)	7,933	19,899
State	(2,506)	550	(1,205)
Foreign	(6,277)	(478)	395
	(9,748)	8,005	19,089
Provision for income taxes	$ 39,713	$ 50,499	$ 28,846
Effective tax rate	22.8%	34.1%	30.5%

The Company's effective income tax rate varied from the amount computed using the statutory federal income tax rate of 21% as follows (in thousands):

	For the years ended December 31,		
	2020	2019	2018
Tax expense at US statutory rate	$ 36,655	$ 31,130	$ 19,841
State income taxes, net of federal benefit	9,837	10,597	8,711
Foreign rate differential	1,256	276	(1,124)
Valuation allowance	(11,339)	4,459	10,466
Uncertain tax position interest and penalties	(712)	474	(1,806)
Tax credits	2,039	(50)	(9,799)
Non-deductible compensation	1,406	1,922	1,813
Other	571	1,691	1,032
Adjustment for Tax Cuts and Jobs Act	—	—	(288)
Provision for income taxes	$ 39,713	$ 50,499	$ 28,846

The valuation allowance benefit of $11.3 million recognized in 2020 is predominately related to taxable earnings in certain Canadian entities that benefited from the wage subsidy received under the CEWS. In addition, the foreign tax credit that expired in 2020 had a full valuation allowance which was also written off, contributing to the valuation allowance benefit in the table above. The foreign tax credit expiration and valuation allowance write off had no net impact to the provision for income taxes.

During 2018, the Company completed an analysis of certain federal manufacturing and research and development credit benefits for tax years 2014 through 2017. Upon the filing of its 2017 tax return in October 2018, the Company recognized $3.3 million of tax benefits and recognized an additional $7.1 million upon the amendments of its 2014 through 2016 tax returns for a net benefit recorded as a component of the 2018 tax provision of $9.8 million (shown as Tax credits in the table above). The Company collected the refund during 2020.

During the years ended December 31, 2020 and December 31, 2018, the Company recorded $1.3 million and $5.0 million, respective, of tax benefits related to tax deductible foreign currency losses to accumulated other comprehensive loss and as such these benefits are not included within the provision for income taxes. See Note 15, "Accumulated Other Comprehensive Loss," for additional information related to these transactions.

The components of the total net deferred tax assets and liabilities as of December 31, 2020 and 2019 were as follows (in thousands):

	2020	2019
Deferred tax assets:		
Provision for doubtful accounts	$ 10,305	$ 8,949
Closure, post-closure and remedial liabilities	28,665	26,960
Operating lease liabilities	38,151	40,879
Accrued expenses	16,797	17,602
Accrued compensation and benefits	11,372	7,155
Net operating loss carryforwards[(1)]	50,433	50,824
Tax credit carryforwards[(2)]	14,471	16,909
Interest rate swap liability	10,089	6,252
Stock-based compensation	3,040	2,435
Other	5,553	8,342
Total deferred tax assets	188,876	186,307
Deferred tax liabilities:		
Property, plant and equipment	(194,604)	(184,594)
Operating lease right-of-use assets	(38,018)	(40,985)
Permits and other intangible assets	(95,492)	(98,654)
Prepaid expenses	(9,660)	(9,694)
Total deferred tax liabilities	(337,774)	(333,927)
Total net deferred tax liability before valuation allowance	(148,898)	(147,620)
Less valuation allowance	(77,044)	(83,643)
Net deferred tax liabilities	$ (225,942)	$ (231,263)

(1) As of December 31, 2020, the net operating loss carryforwards included (i) state net operating loss carryovers of $193.2 million which will begin to expire in 2021, (ii) federal net operating loss carryforwards of $16.8 million which will begin to expire in 2025 and (iii) foreign net operating loss carryforwards of $151.5 million which will begin to expire in 2021.

(2) As of December 31, 2020, the foreign tax credit carryforwards of $14.1 million will expire between 2021 and 2024.

The Company has not accrued for any remaining undistributed foreign earnings. These amounts continue to be indefinitely reinvested in foreign operations.

A valuation allowance is required to be established when, based on an evaluation of available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The components of the total valuation allowance as of December 31, 2020 and 2019 were as follows (in thousands):

	2020	2019
Allowance related to:		
Foreign tax credits	14,127	16,565
Acquired federal net operating losses	779	779
State net operating loss carryforwards	10,429	10,663
Foreign net operating loss carryforwards	29,839	34,149
Deferred tax assets of a Canadian subsidiary	11,468	14,922
Realized and unrealized capital losses	10,402	6,565
Total valuation allowance	$ 77,044	$ 83,643

The changes to unrecognized tax benefits (excluding related penalties and interest) from January 1, 2018 through December 31, 2020, were as follows (in thousands):

	2020	2019	2018
Unrecognized tax benefits, beginning of year	$ 6,414	$ 3,159	$ 5,121
(Reductions) additions to prior year tax positions	(833)	3,354	(625)
Expirations	(203)	(209)	(1,115)
Foreign currency translation	112	110	(222)
Unrecognized tax benefits, end of year	$ 5,490	$ 6,414	$ 3,159

The unrecognized tax benefits at December 31, 2020 if and when recognized will affect the annual effective tax rate. However, the balance at December 31, 2020 included $3.1 million of unrecognized tax benefits for Canadian Revenue Agency transfer pricing adjustments. Should these be recognized, the Company would request relief from double taxation. Therefore, an offsetting benefit of $3.1 million would also recognized resulting in no net effect on the annual effective tax rate.

The Company does not currently believe that the total unrecognized tax benefits will change within the next 12 months.

At December 31, 2020, 2019 and 2018, the Company had accrued interest of $2.1 million, $1.7 million and $0.8 million, respectively, relative to unrecognized tax benefits. Interest expense and penalties relative to unrecognized tax benefits for the years ended December 31, 2020, 2019 and 2018 were immaterial.

The Company files U.S. federal income tax returns as well as income tax returns in various states and foreign jurisdictions. The Company may be subject to examination by the IRS for calendar years 2015 through 2019. The Company may be subject to examination by Canadian federal and provincial authorities for calendar years 2013 through 2019 and by state and local revenue authorities for calendar years 2014 through 2019. The Company has ongoing U.S. state and local jurisdictional audits, as well as Canadian federal and provincial audits, all of which the Company believes will not result in material liabilities.

(13) EARNINGS PER SHARE

The following are computations of basic and diluted earnings per share (in thousands, except for per share amounts):

	For the years ended December 31,		
	2020	2019	2018
Numerator for basic and diluted earnings per share:			
Net income	$ 134,837	$ 97,740	$ 65,636
Denominator:			
Weighted basic shares outstanding	55,479	55,845	56,148
Dilutive effect of equity-based compensation awards	211	284	192
Weighted dilutive shares outstanding	55,690	56,129	56,340
Basic earnings per share	$ 2.43	$ 1.75	$ 1.17
Diluted earnings per share	$ 2.42	$ 1.74	$ 1.16

For the years ended December 31, 2020, 2019 and 2018, all then outstanding performance awards and restricted stock awards were included in the calculation of diluted earnings per share except for 53,667, 122,785 and 79,390 respectively, of performance stock awards for which the performance criteria were not attained at the reporting dates and 8,878, 16,304 and 121,803 respectively, of restricted stock awards and performance stock awards which were excluded as their inclusion would have had an antidilutive effect.

(14) STOCKHOLDERS' EQUITY

The Company's board of directors has authorized the repurchase of up to $600.0 million of the Company's common stock. The repurchase program authorizes the Company to purchase the Company's common stock on the open market or in privately negotiated transactions periodically in a manner that complies with applicable U.S. securities laws. The number of shares purchased and the timing of the purchases have depended and will depend on a number of factors including share price, cash required for future business plans, trading volume and other conditions. The Company has no obligation to repurchase stock under this program and may suspend or terminate the repurchase program at any time.

During the years ended December 31, 2020, 2019 and 2018, the Company repurchased and retired a total of 1.2 million, 0.3 million and 0.8 million shares, respectively, of the Company's common stock for total costs of $74.8 million, $21.4 million and $45.1 million, respectively. As of December 31, 2020, an additional $209.9 million remained available for repurchase of shares under this program.

(15) ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in accumulated other comprehensive loss by component and related tax impacts for the years ended December 31, 2020, 2019 and 2018 were as follows (in thousands):

	Foreign Currency Translation Adjustments	Unrealized (Losses) Gains on Available-for-Sale Securities	Unrealized Loss on Interest Rate Hedge	Unrealized (loss) gain on unfunded pension liability	Total
Balance at January 1, 2018	$ (170,575)	$ (146)	$ —	$ (1,686)	$ (172,407)
Other comprehensive (loss) income before reclassifications	(47,374)	182	(9,579)	124	(56,647)
Amounts reclassified out of accumulated other comprehensive loss	—	—	806	—	806
Tax benefit (expense)	5,024	(105)	—	(42)	4,877
Other comprehensive (loss) income, net of tax	(42,350)	77	(8,773)	82	(50,964)
Balance at December 31, 2018	(212,925)	(69)	(8,773)	(1,604)	(223,371)
Other comprehensive income (loss) before reclassifications	25,130	(70)	(14,401)	60	10,719
Amounts reclassified out of accumulated other comprehensive loss	—	332	2,335	—	2,667
Tax expense	—	(50)	—	(16)	(66)
Other comprehensive income (loss)	25,130	212	(12,066)	44	13,320
Balance at December 31, 2019	(187,795)	143	(20,839)	(1,560)	(210,051)
Other comprehensive income (loss) before reclassifications	10,212	(10)	(20,970)	(255)	(11,023)
Amounts reclassified out of accumulated other comprehensive loss	—	—	8,180	—	8,180
Tax benefit	1,349	2	—	66	1,417
Other comprehensive income (loss)	11,561	(8)	(12,790)	(189)	(1,426)
Balance at December 31, 2020	$ (176,234)	$ 135	$ (33,629)	$ (1,749)	$ (211,477)

During the years ended December 31, 2020 and December 31, 2018, the Company converted intercompany loans with a foreign subsidiary to equity, which resulted in deductible tax losses. The loans had been historically treated as a component of the Company’s investment in that subsidiary, and as a result, foreign currency gains and losses on the loans had been accumulated as a component of other comprehensive (loss) income. The tax benefits of $1.3 million and $5.0 million, respectively, which were triggered by the conversions were therefore allocated to other comprehensive loss rather than net income.

The amounts reclassified out of accumulated other comprehensive loss into the consolidated statement of operations, with presentation location, during the years ended December 31, 2020, 2019 and 2018 were as follows (in thousands):

	For the years ended December 31,			
Other Comprehensive Income Components	**2020**	**2019**	**2018**	**Location**
Unrealized loss on available-for-sale securities	$ —	$ (332)	$ —	Other (expense) income, net
Unrealized loss on interest rate hedge	(8,180)	(2,335)	(806)	Interest expense, net of interest income

(16) STOCK-BASED COMPENSATION

Stock-Based Compensation

On June 3, 2020, our shareholders approved the Clean Harbors, Inc. 2020 Stock Incentive Plan (the "2020 Plan"). The 2020 Plan provides for future awards of up to 2.5 million shares of the Company’s common stock (subject to certain anti-dilution adjustments) in the form of stock options, stock appreciation rights, restricted stock, restricted stock units and other stock-based awards. The 2020 Plan is administered by the Compensation Committee of the Company’s Board of Directors. The Company's previous stock incentive plan (the "2010 Plan") expired on May 10, 2020. In connection with the adoption of the 2020 Plan, no further awards will be made under the 2010 Plan.

The Company grants restricted stock awards and performance stock awards. The restricted stock awards generally vest over three to five years subject to continued employment. The performance stock awards vest depending on the satisfaction of certain performance conditions typically based on revenue, Adjusted EBITDA margin, free cash flow and a measure of workplace safety. In addition, performance stock awards include continued service conditions subsequent to the attainment of any performance conditions.

Total stock-based compensation expense for the years ended December 31, 2020, 2019 and 2018 was $18.5 million, $17.8 million and $16.8 million, respectively. The total income tax benefit recognized in the consolidated statements of operations from stock-based compensation expense was $4.2 million, $3.1 million and $3.2 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Restricted Stock Awards

The following table summarizes information about restricted stock awards for the year ended December 31, 2020:

Restricted Stock	Number of Shares	Weighted Average Grant-Date Fair Value
Balance at January 1, 2020	522,597	$ 59.57
Granted	225,548	58.23
Vested	(208,652)	57.89
Forfeited	(45,614)	58.81
Balance at December 31, 2020	493,879	$ 59.74

As of December 31, 2020, there was $19.8 million of total unrecognized compensation cost arising from restricted stock awards. This cost is expected to be recognized over a weighted average period of 2.7 years. The total fair value of restricted stock vested during 2020, 2019 and 2018 was $13.3 million, $16.8 million and $10.8 million, respectively.

Performance Stock Awards

The following table summarizes information about performance stock awards for the year ended December 31, 2020:

Performance Stock	Number of Shares	Weighted Average Grant-Date Fair Value
Balance at January 1, 2020	204,553	$ 64.78
Granted	161,610	58.30
Vested	(54,377)	55.75
Forfeited	(57,337)	78.02
Balance at December 31, 2020	254,449	$ 53.79

As of December 31, 2020, there was $5.1 million of total unrecognized compensation cost arising from performance stock awards whereby the performance conditions had either been met or were probable of vesting. The total fair value of performance awards vested during 2020, 2019 and 2018 was $3.5 million, $8.1 million and $1.2 million, respectively.

(17) COMMITMENTS AND CONTINGENCIES

Legal and Administrative Proceedings

The Company and its subsidiaries are subject to legal proceedings and claims arising in the ordinary course of business. Actions filed against the Company arise from commercial and employment-related claims including alleged class actions related to sales practices and wage and hour claims. The plaintiffs in these actions may be seeking damages or injunctive relief or both. These actions are in various jurisdictions and stages of proceedings, and some are covered in part by insurance. In addition, the Company’s waste management services operations are regulated by federal, state, provincial and local laws enacted to regulate discharge of materials into the environment, remediation of contaminated soil and groundwater or otherwise protect the environment. This ongoing regulation results in the Company frequently becoming a party to legal or administrative proceedings involving all levels of government authorities and other interested parties. The issues involved in such proceedings generally relate to alleged violations of existing permits and licenses or alleged responsibility under federal or state Superfund laws to remediate contamination at properties owned either by the Company or by other parties (“third-party sites”) to which either the Company or the prior owners of certain of the Company’s facilities shipped waste.

At December 31, 2020 and 2019, the Company had recorded reserves of $29.8 million and $26.0 million, respectively, for actual or probable liabilities related to the legal and administrative proceedings in which the Company was then involved, the principal of which are described below. In management's opinion, it is not reasonably possible that the potential liability beyond what has been recorded, if any, that may result from these actions, either individually or collectively, will have a material effect on our financial position, results of operations or cash flows. The Company periodically adjusts the aggregate amount of these reserves when actual or probable liabilities are paid or otherwise discharged, new claims arise, or additional relevant information about existing or probable claims becomes available. As of December 31, 2020 and 2019, the $29.8 million and $26.0 million, respectively, of reserves consisted of (i) $24.0 million and $18.4 million, respectively, related to pending legal or administrative proceedings, including Superfund liabilities, which were included in remedial liabilities on the consolidated balance sheets, and (ii) $5.8 million and $7.6 million, respectively, primarily related to federal, state and provincial enforcement actions, which were included in accrued expenses on the consolidated balance sheets.

As of December 31, 2020, the principal legal and administrative proceedings in which the Company was involved, or which had been terminated during 2020, were as follows:

Ville Mercier. In September 2002, the Company acquired the stock of a subsidiary (the "Mercier Subsidiary") which owns a hazardous waste incinerator in Ville Mercier, Quebec (the "Mercier Facility"). The property adjacent to the Mercier Facility, which is also owned by the Mercier Subsidiary, is now contaminated as a result of actions dating back to 1968, when the Government of Quebec issued to a company unrelated to the Mercier Subsidiary two permits to dump organic liquids into lagoons on the property. In 1999, Ville Mercier and three neighboring municipalities filed separate legal proceedings against the Mercier Subsidiary and the Government of Quebec. In 2012, the municipalities amended their existing statement of claim to seek $2.9 million (CAD $) in general damages and $10.0 million (CAD $) in punitive damages, plus interest and costs, as well as injunctive relief. Both the Government of Quebec and the Company have filed summary judgment motions against the municipalities. The parties are attempting to negotiate a resolution and hearings on the motions have been delayed. In September 2007, the Quebec Minister of Sustainable Development, Environment and Parks issued a notice pursuant to Section 115.1 of the Environment Quality Act, superseding notices issued in 1992, which are the subject of the pending litigation. The more recent notice notifies the Mercier Subsidiary that, if the Mercier Subsidiary does not take certain remedial measures at the site, the Minister intends to undertake those measures at the site and claim direct and indirect costs related to such measures. The Company has accrued for costs expected to be incurred relative to the resolution of this matter and believes this matter will not have future material effect on its financial position or results of operations.

Safety-Kleen Legal Proceedings. On December 28, 2012, the Company acquired Safety-Kleen, Inc. ("Safety-Kleen") and thereby became subject to the legal proceedings in which Safety-Kleen was a party on that date. In addition to certain Superfund proceedings in which Safety-Kleen has been named as a potentially responsible party as described below under “Superfund Proceedings,” the principal such legal proceedings involving Safety-Kleen which were outstanding as of December 31, 2020 were as follows:

Product Liability Cases. Safety-Kleen has been named as a defendant in various lawsuits that are currently pending in various courts and jurisdictions throughout the United States, including approximately 68 proceedings (excluding cases which have been settled but not formally dismissed) as of December 31, 2020, wherein persons claim personal injury resulting from the use of Safety-Kleen's parts cleaning equipment or cleaning products. These proceedings typically involve allegations that the solvent used in Safety-Kleen's parts cleaning equipment contains contaminants and/or that Safety-Kleen's recycling process does not effectively remove the contaminants that become entrained in the solvent during their use. In addition, certain claimants assert that Safety-Kleen failed to warn adequately the product user of potential risks, including a historic failure to warn that solvent contains trace amounts of toxic or hazardous substances such as benzene.

The Company maintains insurance that it believes will provide coverage for these product liability claims (over amounts accrued for self-insured retentions and deductibles in certain limited cases), except for punitive damages to the extent not insurable under state law or excluded from insurance coverage. The Company also believes that these claims lack merit and has historically vigorously defended, and intends to continue to vigorously defend, itself and the safety of its products against all of these claims. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. Consequently, The Company is unable to ascertain the ultimate aggregate amount of monetary liability or financial impact with respect to these matters as of December 31, 2020. From January 1, 2020 to December 31, 2020, 12 product liability claims were settled or dismissed. Due to the nature of these claims and the related insurance, the Company did not incur any expense as insurance provided coverage in full for all such claims. Safety-Kleen may be named in similar, additional lawsuits in the future, including claims for which insurance coverage may not be available.

Superfund Proceedings

The Company has been notified that either the Company (which, since December 28, 2012, has included Safety-Kleen) or the prior owners of certain of the Company's facilities for which the Company may have certain indemnification obligations have been identified as PRPs or potential PRPs in connection with 130 sites which are subject to or are proposed to become subject to proceedings under federal or state Superfund laws. Of the 130 Superfund related sites, five (including the BR Facility described below) involve facilities that are now owned or leased by the Company and 125 involve third-party sites to which either the Company or the prior owners of certain of the Company's facilities shipped waste. Of the 125 third-party sites, 31 are now settled, 15 are currently requiring expenditures on remediation and 79 are not currently requiring expenditures on remediation.

In connection with each site, the Company has estimated the extent, if any, to which it may be subject, either directly or as a result of any indemnification obligations, for cleanup and remediation costs, related legal and consulting costs associated with PRP investigations, settlements, and related legal and administrative proceedings. The amount of such actual and potential liability is inherently difficult to estimate because of, among other relevant factors, uncertainties as to the legal liability (if any) of the Company or the prior owners of certain of the Company's facilities to contribute a portion of the cleanup costs, the assumptions that must be made in calculating the estimated cost and timing of remediation, the identification of other PRPs and their respective capability and obligation to contribute to remediation efforts, and the existence and legal standing of indemnification agreements (if any) with prior owners, which may either benefit the Company or subject the Company to potential indemnification obligations. The Company believes its potential monetary liability could exceed $1.0 million at each of three of the 130 Superfund related sites.

BR Facility. The Company acquired in 2002 a former hazardous waste incinerator and landfill in Baton Rouge (the "BR Facility"), for which operations had been previously discontinued by the prior owner. In September 2007, the EPA issued a special notice letter to the Company related to the Devil's Swamp Lake Site ("Devil's Swamp") in East Baton Rouge Parish, Louisiana. Devil's Swamp includes a lake located downstream of an outfall ditch where wastewater and storm water have been discharged, and Devil's Swamp is proposed to be included on the National Priorities List due to the presence of Contaminants of Concern ("COC") cited by the EPA. These COCs include substances of the kind found in wastewater and storm water discharged from the BR Facility in past operations. The EPA originally requested COC generators to submit a good faith offer to conduct a remedial investigation feasibility study directed towards the eventual remediation of the site. In 2018, the Company completed performing corrective actions at the BR Facility under an order issued by the Louisiana Department of Environmental Quality, and completed conducting the remedial investigation and feasibility study for Devil's Swamp, at which point the feasibility study, with several remedial alternatives, was submitted to the EPA for review. During the year ended December 31, 2020, the EPA signed a Record of Decision which defines the remediation alternative selected and approved by the EPA. Based upon this Record of Decision, the Company increased the estimated remedial liability for this inactive site by $3.3 million. As of December 31, 2020, the Company has recorded its best estimate of the costs to execute upon this remediation alternative. Changes in the natural landscape and/or new information identified during the remediation could impact this estimate, but are not expected to have a future material effect on the Company's financial position, liquidity or results of operation.

Third-Party Sites. Of the 125 third-party sites at which the Company has been notified it is a PRP or potential PRP or may have indemnification obligations, Clean Harbors has an indemnification agreement at 11 of these sites with ChemWaste, a former subsidiary of Waste Management, Inc., and at six additional of these third-party sites, Safety-Kleen has a similar indemnification agreement with McKesson Corporation. These agreements indemnify the Company (which now includes Safety-Kleen) with respect to any liability at the 17 sites for waste disposed prior to the Company's (or Safety-Kleen's) acquisition of the former subsidiaries of Waste Management and McKesson which had shipped waste to those sites. Accordingly, Waste Management or McKesson are paying all costs of defending those subsidiaries in those 17 cases, including legal fees and settlement costs. However, there can be no guarantee that the Company's ultimate liabilities for those sites will not exceed the amount recorded or that indemnities applicable to any of these sites will be available to pay all or a portion of related costs. Except for the indemnification agreements which the Company holds from ChemWaste, McKesson and two other entities, the Company does not have an indemnity agreement with respect to any of the 125 third-party sites discussed above.

Federal, State and Provincial Enforcement Actions

From time to time, the Company pays fines or penalties in regulatory proceedings relating primarily to waste treatment, storage or disposal facilities. As of December 31, 2020 there were no proceedings for which the Company reasonably believes that the sanctions could equal or exceed $1.0 million. The Company believes that the fines or other penalties in these or any of the other regulatory proceedings will, individually or in the aggregate, not have a material effect on its financial condition, results of operations or cash flows.

Self-Insurance Liabilities

Under the Company's insurance programs, coverage is obtained for catastrophic exposures, as well as those risks required to be insured by law or contract. The Company's policy is to retain a significant portion of certain expected losses related to workers' compensation, employee medical, comprehensive general liability and vehicle liability. A portion of these self-insured liabilities are managed through its wholly-owned captive insurance subsidiary.

Provisions for losses expected under these programs are recorded based upon the Company's estimates of the aggregate liability for claims. The current deductible per participant per year for the employee medical insurance policy is $0.8 million. The current deductible per occurrence for workers' compensation is $1.0 million, general liability is $2.0 million and vehicle liability is $2.0 million. The retention per claim for the environmental impairment policy is $1.0 million. We maintain umbrella insurance to limit our exposure to certain catastrophic claim costs, including general liability and vehicle claim costs. For the policy year starting in the fourth quarter of 2020, the Company changed the umbrella policy terms to include a $5.0 million annual aggregate self-insured corridor retention. At December 31, 2020 and 2019, the Company had accrued $65.6 million and $59.4 million, respectively, for its self-insurance liabilities (exclusive of employee medical insurance) using a risk-free discount rate of 0.29% and 1.52%, respectively.

Anticipated payments for contingencies related to workers' compensation, comprehensive general liability and vehicle liability related claims at December 31, 2020 for each of the next five years and thereafter were as follows (in thousands):

Years ending December 31,	
2021	$ 22,896
2022	13,751
2023	9,655
2024	6,448
2025	4,990
Thereafter	8,188
Undiscounted self-insurance liabilities	65,928
Less: Discount	(320)
Total self-insurance liabilities (included in accrued expenses)	$ 65,608

(18) LEASES

As of December 31, 2020, the Company’s lease portfolio was predominately operating leases for real estate, equipment, such as vehicles and industrial equipment utilized in operations, and rail cars. The Company presents operating lease balances separately on the consolidated balance sheet. The Company's finance leases relate to equipment, rail cars and certain real estate. The following table presents our finance lease balances and their classification on the consolidated balance sheets (in thousands):

Finance Lease Balances (Classification)	December 31, 2020	December 31, 2019
ROU assets (Property, plant and equipment, net)	$ 60,271	$ 32,307
Current portion of lease liabilities (Accrued expenses)	5,840	801
Long-term portion of lease liabilities (Other long-term liabilities)	55,038	34,517

The Company’s lease expense was as follows (in thousands):

	For the year ended December 31, 2020	For the year ended December 31, 2019
Operating lease cost	$ 53,194	$ 55,402
Finance lease cost:		
Amortization of ROU assets	4,966	1,142
Interest on lease liabilities	1,523	1,415
Total finance lease cost	6,489	2,557
Short-term lease cost	70,692	84,749
Variable lease cost	3,691	6,702
Total lease cost	$ 134,066	$ 149,410

Rent expense, including short-term rentals for the year ended December 31, 2018, prior to the Company's adoption of ASC 842, was $141.1 million.

Other information related to leases was as follows:

Weighted Average Remaining Lease Term (years)	December 31, 2020	December 31, 2019
Operating leases	5.1	5.1
Finance leases	9.3	21.3
Weighted Average Discount Rate		
Operating leases	4.89 %	5.29 %
Finance leases	3.57 %	4.97 %

The weighted average remaining lease term of the finance leases decreased significantly due to the 2020 acquisition of the Company's corporate headquarters which had previously been recognized as a finance lease.

Supplemental Cash Flow Related Disclosures (in thousands)	For the year ended December 31, 2020	For the year ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 53,498	$ 56,240
Operating cash flows from finance leases	1,523	1,415
Financing cash flows from finance leases	4,469	586
ROU assets obtained in exchange for operating lease liabilities	34,358	17,699
ROU assets obtained in exchange for finance lease liabilities	32,526	33,449

At December 31, 2020, the Company's future lease payments under non-cancelable leases that have lease terms in excess of one year were as follows (in thousands):

	December 31, 2020	
Years ending December 31,	Operating Leases	Finance Leases
2021	$ 45,341	$ 8,407
2022	37,629	8,972
2023	29,014	8,281
2024	21,048	8,248
2025	14,672	7,573
Thereafter	25,064	31,632
Total future lease payments	172,768	73,113
Amount representing interest	(21,760)	(12,235)
Total lease liabilities	$ 151,008	$ 60,878

At December 31, 2020, none of the Company's executed leases that had not yet commenced will create significant rights or obligations in the future and its sublease transactions are not material. Additionally, the Company does not have any related party leases, and there were no restrictions or covenants imposed by its leases.

(19) SEGMENT REPORTING

Segment reporting is prepared on the same basis that the Company's chief executive officer, who is the Company's chief operating decision maker, manages the business, makes operating decisions and assesses performance. The Company is managed and reports as two operating segments; (i) the Environmental Services segment and (ii) the Safety-Kleen segment.

Third-party revenue is revenue billed to outside customers by a particular segment. Direct revenues is revenue allocated to the segment providing the product or service. Intersegment revenues represent the sharing of third-party revenues among the segments based on products and services provided by each segment as if the products and services were sold directly to the third-party. The intersegment revenues are shown net. The operations not managed through the Company's operating segments described above are recorded as "Corporate Items."

The following tables reconcile third-party revenues to direct revenues for the years ended December 31, 2020, 2019 and 2018 (in thousands):

	For the year ended December 31, 2020			
	Environmental Services	Safety-Kleen	Corporate Items	Totals
Third-party revenues	$ 2,004,081	$ 1,139,726	$ 290	$ 3,144,097
Intersegment revenues, net	129,666	(129,666)	—	—
Corporate Items, net	3,559	142	(3,701)	—
Direct revenues	$ 2,137,306	$ 1,010,202	$ (3,411)	$ 3,144,097

	For the year ended December 31, 2019			
	Environmental Services	Safety-Kleen	Corporate Items	Totals
Third-party revenues	$ 2,092,363	$ 1,318,691	$ 1,136	$ 3,412,190
Intersegment revenues, net	140,577	(140,577)	—	—
Corporate Items, net	4,128	15	(4,143)	—
Direct revenues	$ 2,237,068	$ 1,178,129	$ (3,007)	$ 3,412,190

	For the year ended December 31, 2018			
	Environmental Services	Safety-Kleen	Corporate Items	Totals
Third-party revenues	$ 2,003,843	$ 1,295,355	$ 1,105	$ 3,300,303
Intersegment revenues, net	134,104	(134,104)	—	—
Corporate Items, net	3,247	31	(3,278)	—
Direct revenues	$ 2,141,194	$ 1,161,282	$ (2,173)	$ 3,300,303

The primary financial measure by which the Company evaluates the performance of its segments is Adjusted EBITDA, which consists of net income plus accretion of environmental liabilities, depreciation and amortization, net interest expense, loss on early extinguishment of debt and provision for income taxes and excludes other gains, losses and non-cash charges not deemed representative of fundamental segment results and other expense (income), net. Transactions between the segments are accounted for at the Company's best estimate based on similar transactions with outside customers.

The following table presents Adjusted EBITDA information used by management by reported segment (in thousands):

	For the years ended December 31,		
	2020	2019	2018
Adjusted EBITDA:			
Environmental Services	$ 519,960	$ 446,284	$ 380,856
Safety-Kleen	229,172	282,378	282,029
Corporate Items	(193,830)	(188,345)	(171,880)
Total	555,302	540,317	491,005
Reconciliation to Consolidated Statements of Operations:			
Accretion of environmental liabilities	11,051	10,136	9,806
Depreciation and amortization	292,915	300,725	298,625
Income from operations	251,336	229,456	182,574
Other expense (income), net	290	(2,897)	4,510
Loss on early extinguishment of debt	—	6,131	2,488
Loss (gain) on sale of businesses	3,376	(687)	—
Interest expense, net of interest income	73,120	78,670	81,094
Income from operations before provision for income taxes	$ 174,550	$ 148,239	$ 94,482

The following table presents assets by reported segment and in the aggregate (in thousands):

	December 31, 2020	December 31, 2019
Property, plant and equipment, net		
Environmental Services	$ 879,176	$ 939,352
Safety-Kleen	555,894	555,310
Corporate Items	90,228	93,489
Total property, plant and equipment, net	$ 1,525,298	$ 1,588,151
Goodwill and Permits and other intangibles, net		
Environmental Services		
Goodwill	$ 212,386	$ 212,531
Permits and other intangibles, net	78,928	89,722
Total Environmental Services	291,314	302,253
Safety-Kleen		
Goodwill	$ 314,637	$ 312,482
Permits and other intangibles, net	307,692	329,344
Total Safety-Kleen	622,329	641,826
Total	$ 913,643	$ 944,079

Geographic Information

As of December 31, 2020 and 2019, the Company had property, plant and equipment, net of depreciation and amortization and permits and other intangible assets, net of amortization in the following geographic locations (in thousands):

	December 31, 2020		December 31, 2019	
	Total	% of Total	Total	% of Total
Property, plant and equipment, net				
United States	$ 1,246,758	81.7 %	$ 1,273,205	80.2 %
Canada and other foreign	278,540	18.3	314,946	19.8
Total property, plant and equipment, net	$ 1,525,298	100.0 %	$ 1,588,151	100.0 %
Permits and other intangibles, net				
United States	$ 342,787	88.7 %	$ 372,609	88.9 %
Canada and other foreign	43,833	11.3	46,457	11.1
Total permits and other intangibles, net	$ 386,620	100.0 %	$ 419,066	100.0 %

The following table presents the total assets by geographical area (in thousands):

	December 31, 2020	December 31, 2019
United States	$ 3,447,811	$ 3,413,254
Canada and other foreign	683,709	695,650
Total	$ 4,131,520	$ 4,108,904

CLEAN HARBORS, INC. AND SUBSIDIARIES

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

For the Three Years Ended December 31, 2020

(in thousands)

Allowance for Doubtful Accounts	Balance Beginning of Period	Additions Charged to Operating Expense	Deductions from Reserves (1)	Balance End of Period
2018	$ 16,173	$ 15,817	$ 5,622	$ 26,368
2019	26,368	2,408	6,283	22,493
2020	22,493	10,133	7,992	24,634

(1) Amounts deemed uncollectible, net of recoveries.

Revenue Allowance(2)	Balance Beginning of Period	Additions Charged to Revenue	Deductions from Reserves	Balance End of Period
2018	$ 11,626	$ 41,338	$ 35,017	$ 17,947
2019	17,947	35,549	37,278	16,218
2020	16,218	45,784	41,887	20,115

(2) Due to the nature of the Company's businesses and the invoices that result from the services provided, customers may withhold payments and attempt to renegotiate amounts invoiced. In addition, for some of the services provided, the Company's invoices are based on quotes that can either generate credits or debits when the actual revenue amount is known. Based on industry knowledge and historical trends, the Company records a revenue allowance accordingly. This practice causes the volume of activity flowing through the revenue allowance during the year to be higher than the balance at the end of the year. Increases in overall sales volumes and the expansion of the customer base in recent years have also increased the volume of additions and deductions to the allowance during the year. The revenue allowance is intended to cover the net amount of revenue adjustments that may need to be credited to customers' accounts in future periods. Management determines the appropriate total revenue allowance by evaluating the following factors on a customer-by-customer basis as well as on a consolidated level: trends in adjustments to previously billed amounts, existing economic conditions and other information as deemed applicable. Revenue allowance estimates can differ materially from the actual adjustments, but historically the revenue allowance has been sufficient to cover the net amount of the reserve adjustments issued in subsequent reporting periods.

Valuation Allowance on Deferred Tax Assets	Balance Beginning of Period	Additions Charged to Income Tax Expense	Other Changes to Reserves	Balance End of Period
2018	$ 68,355	$ 10,466	$ 474	$ 79,295
2019	79,295	4,459	(111)	83,643
2020	83,643	(11,339)	4,740	77,044

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, as of the end of the period covered by this Annual Report on Form 10-K, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures (as defined under Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) were effective as of December 31, 2020 to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as that term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of the Company's management, including the Chief Executive Officer and Chief Financial Officer, the Company conducted an evaluation of its internal control over financial reporting based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company's management evaluated the effectiveness of Clean Harbors internal control over financial reporting as of December 31, 2020. Based on their evaluation under the framework in *Internal Control—Integrated Framework (2013)*, the Company's management concluded that the Company maintained effective internal control over financial reporting as of December 31, 2020 based on the criteria in the *Internal Control—Integrated Framework (2013)*.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the Company's consolidated financial statements, has issued an attestation report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, which is included below in this Item 9A of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that was conducted during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Limitations on the Effectiveness of Controls

The Company's management, including the Chief Executive Officer and Chief Financial Officer, does not expect that the Company's disclosure controls and procedures or the Company's internal control over financial reporting will prevent all errors and all fraud.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Further, the design of disclosure controls and procedures and internal control over financial reporting must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations of controls and procedures and internal control over financial reporting, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Clean Harbors, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Clean Harbors, Inc. and subsidiaries (the “Company”) as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 24, 2021 expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management’s Annual Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
February 24, 2021

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

Except for the information set forth below under Item 12 with respect to securities authorized for issuance under the registrant's equity compensation plans, the information called for by Item 10 (Directors, Executive Officers and Corporate Governance), Item 11 (Executive Compensation), Item 12 (Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters), Item 13 (Certain Relationships and Related Transactions and Director Independence) and Item 14 (Principal Accountant Fees and Services) is incorporated herein by reference to the registrant's definitive proxy statement for its 2021 annual meeting of shareholders, which definitive proxy statement will be filed with the Securities and Exchange Commission by April 23, 2021.

For the purpose of calculating the aggregate market value of the voting stock of the registrant held by non-affiliates as shown on the cover page of this report, it has been assumed that the directors and executive officers of the registrant, as will be set forth in the Company's definitive proxy statement for its 2021 annual meeting of shareholders, are the only affiliates of the registrant. However, this should not be deemed to constitute an admission that all of such persons are, in fact, affiliates or that there are not other persons who may be deemed affiliates of the registrant.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

In addition to the information about the security ownership of certain beneficial owners and management and related stockholder matters which is incorporated herein by reference to the Company's definitive proxy statement for the Company's 2021 annual meeting of shareholders, the following table includes information as of December 31, 2020 regarding shares of common stock authorized for issuance under the Company's equity compensation plan. The Company's shareholders previously approved the plan.

Plan Category	Number of securities to be issued upon exercise of outstanding options and rights(a)	Weighted average exercise price of outstanding options and rights(b)	Number of securities remaining available for future issuance under equity compensation plan (excluding securities reflected in column (a))(c)
Equity compensation plan approved by security holders[(1)]	—	$ —	2,151,942

(1) Includes the Company's 2020 Stock Incentive Plan (the "2020 Plan") under which there were no outstanding options but 2,151,942 shares were available for grant of stock options, stock appreciation rights, restricted stock, restricted stock units and certain other stock-based awards as of December 31, 2020. See Note 16, "Stock-Based Compensation," to the Company's consolidated financial statements included in Item 8, "Financial Statements and Supplementary Data," in this report.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents Filed as a Part of this Report

All other schedules are omitted because they are not applicable, not required, or because the required information is included in the financial statements or notes thereto.

3. Exhibits:

The list of exhibits filed as part of this annual report on Form 10-K is set forth on the Exhibit Index immediately following the signature page to this report, and such Exhibit Index is incorporated herein by reference.

Exhibits to this annual report on Form 10-K have been included only with the copies of the Form 10-K filed with the Securities and Exchange Commission. Upon request to the Company and payment of a reasonable fee, copies of the individual exhibits will be furnished. The Company undertakes to furnish to the Commission upon request copies of instruments (in addition to the exhibits listed below) relating to the Company's acquisitions and long-term debt.

ITEM 16. FORM 10-K SUMMARY

None

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on February 24, 2021.

CLEAN HARBORS, INC.

By: /s/ ALAN S. MCKIM

Alan S. McKim
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ ALAN S. MCKIM Alan S. McKim	Chairman, President and Chief Executive Officer	February 24, 2021
/s/ MICHAEL L. BATTLES Michael L. Battles	Executive Vice President and Chief Financial Officer	February 24, 2021
/s/ ERIC J. DUGAS Eric J. Dugas	Senior Vice President, Finance and Chief Accounting Officer	February 24, 2021
* Eugene Banucci	Director	February 24, 2021
* Edward G. Galante	Director	February 24, 2021
* Rod Marlin	Director	February 24, 2021
* John T. Preston	Director	February 24, 2021
* Andrea Robertson	Director	February 24, 2021
* Thomas J. Shields	Director	February 24, 2021
* Lauren C. States	Director	February 24, 2021
* John R. Welch	Director	February 24, 2021
* Robert Willett	Director	February 24, 2021

*By: /s/ ALAN S. MCKIM

Alan S. McKim
Attorney-in-Fact

EXHIBIT INDEX

Item No.	Description	Location
2.1	Acquisition Agreement by and between Safety-Kleen Services, Inc., as Seller, and Clean Harbors, Inc., as Purchaser, dated as of February 22, 2002	(1)
2.2	First Amendment to Acquisition Agreement by and between Safety-Kleen Services, Inc., as Seller, and Clean Harbors, Inc., as Purchaser, dated as of March 8, 2002	(2)
2.3	Second Amendment to Acquisition Agreement by and between Safety-Kleen Services, Inc. as Seller, and Clean Harbors, Inc. as Purchaser, dated as of April 30, 2002	(3)
2.4	Third Amendment to Acquisition Agreement by and between Safety-Kleen Services, Inc., as Seller, and Clean Harbors, Inc., as Purchaser, dated as of September 6, 2002	(4)
2.5	Fourth Amendment to Acquisition Agreement by and between Safety-Kleen Services, Inc., as Seller and Clean Harbors, Inc., as Purchaser, dated as of July 14, 2003	(5)
2.6	Agreement and Plan of Merger dated as of October 26, 2012 among Safety-Kleen, Inc., Clean Harbors, Inc., and CH Merger Sub, Inc.	(6)
3.1A	Restated Articles of Organization of Clean Harbors, Inc.	(7)
3.1B	Articles of Amendment [as filed on May 9, 2011] to Restated Articles of Organization of Clean Harbors, Inc.	(8)
3.4D	Amended and Restated By-Laws of Clean Harbors, Inc.	(9)
3.4E	Description of rights of holders of Clean Harbors, Inc. common stock	(10)
4.34	Sixth Amended and Restated Credit Agreement dated as of October 28, 2020 among Clean Harbors, Inc., as the U.S. Borrower, Clean Harbors Industrial Services Canada, Inc., as the Canadian Borrower, Bank of America, N.A., as Administrative Agent, and the Lenders party thereto	(11)
4.34B	Amended and Restated Security Agreement (Canadian Domiciled Loan Parties) dated as of November 1, 2016 among Clean Harbors Industrial Services Canada, Inc., as the Canadian Borrower and a Grantor, the subsidiaries of Clean Harbors, Inc. listed on Annex A thereto or that thereafter become a party thereto as Grantors, and Bank of America, N.A., as Agent	(12)
4.34C	Amended and Restated Guarantee (U.S. Domiciled Loan Parties-U.S. Facility Obligations) dated as of November 1, 2016 executed by the U.S. Domiciled Subsidiaries of Clean Harbors, Inc. named therein in favor of Bank of America, N.A., as Agent for itself and the other U.S. Facility Secured Parties	(12)
4.34D	Amended and Restated Guarantee (Canadian Domiciled Loan Parties-Canadian Facility Obligations) dated as of November 1, 2016 executed by the Canadian Domiciled Subsidiaries of Clean Harbors, Inc. named therein in favor of Bank of America, N.A., as Agent for itself and the other Canadian Facility Secured Parties	(12)
4.34E	Amended and Restated Guarantee (U.S. Domiciled Loan Parties-Canadian Facility Obligations) dated as of November 1, 2016 executed by Clean Harbors, Inc. and the U.S. Domiciled Subsidiaries of Clean Harbors, Inc. named therein in favor of Bank of America, N.A., as Agent for itself and the other Canadian Facility Secured Parties	(12)
4.34G	Second Amended and Restated Security Agreement (U.S. Domiciled Loan Parties) dated as of June 30, 2017, among Clean Harbors, Inc., as the U.S. Borrower and a Grantor, the subsidiaries of Clean Harbors, Inc. listed on Annex A thereto or that thereafter become a party thereto as Grantors, and Bank of America, N.A., as Agent	(13)
4.34K	Amended and Restated Confirmation and Ratification of Ancillary Loan Documents dated as of October 28, 2020 among Clean Harbors, Inc., as the U.S. Borrower, Clean Harbors Industrial Services Canada, Inc., as the Canadian Borrower, the subsidiaries of Clean Harbors, Inc. listed on Annex A thereto or that thereafter become a party thereto as Grantors, and Bank of America, N.A., as Agent for its own benefit and the benefit of the other Lenders and Credit Parties	(11)
4.43	Credit Agreement dated as of June 30, 2017, among the Financial Institutions party thereto, as Lenders, Goldman Sachs Lending Partners LLC, as Administrative Agent and Collateral Agent, Clean Harbors, Inc., as Borrower, and the Loan Guarantors from time to time party thereto	(13)
4.43A	Security Agreement dated as of June 30, 2017, among Clean Harbors, Inc. and its subsidiaries listed on Annex A thereto or that become a party thereto as the Grantors, and Goldman Sachs Lending Partners LLC, as the Agent	(13)
4.43B	First Amendment to Credit Agreement dated as of April 17, 2018, among the Financial Institutions party thereto, as Lenders, Goldman Sachs Lending Partners LLC, as Administrative Agent and Collateral Agent, Clean Harbors, Inc., as Borrower, and the Loan Guarantors from time to time party thereto	(14)

Item No.	Description	Location
4.43C	Incremental Facility Amendment dated July 19, 2018, to Credit Agreement dated as of June 30, 2017, among the Financial Institutions party thereto, as Lenders, Goldman Sachs Lending Partners LLC, as Administrative Agent and Collateral Agent, Clean Harbors, Inc., as Borrower, and the Loan Guarantors from time to time party thereto	(15)
4.44	Intercreditor Agreement dated as of June 30, 2017, among Clean Harbors, Inc., and the subsidiaries of Clean Harbors, Inc. listed on the signature pages thereto (together with any subsidiary that becomes a party thereto after the date thereof), Bank of America, N.A., as the Initial ABL Agent, and Goldman Sachs Lending Partners LLC, as agent under the Term Loan Agreement	(13)
4.45	Indenture dated as of July 2, 2019, among Clean Harbors, Inc., as Issuer, the subsidiaries of Clean Harbors, Inc. named therein as Guarantors, and U.S. Bank National Association, as Trustee	(16)
10.43*	Key Employee Retention Plan	(17)
10.43A*	Form of Severance Agreement under Key Employee Retention Plan with Confidentiality and Non-Competition Agreement	(18)
10.52C*	Clean Harbors, Inc. Management Incentive Plan [as amended and restated effective January 1, 2017]	(19)
10.56*	Mike Battles accepted offer letter effective as of January 6, 2016	(20)
10.57*	Clean Harbors, Inc. 2019 CEO Annual Incentive Bonus Plan	(21)
10.58*	Clean Harbors, Inc. 2020 Stock Incentive Plan	(22)
10.58A*	Form of Restricted Stock Award Agreement [Non-Employee Director] [for use under 2020 Stock Incentive Plan]	(23)
10.58B*	Form of Restricted Stock Award Agreement [Employee] [for use under Clean Harbors, Inc. 2020 Stock Incentive Plan]	(23)
10.58C*	Form of Performance-Based Restricted Stock Award Agreement [for use under Clean Harbors, Inc. 2020 Stock Incentive Plan]	(23)
21	Subsidiaries	Filed herewith
23	Consent of Independent Registered Public Accounting Firm	Filed herewith
24	Power of Attorney	Filed herewith
31.1	Rule 13a-14a/15d-14(a) Certification of the CEO Alan S. McKim	Filed herewith
31.2	Rule 13a-14a/15d-14(a) Certification of the CFO Michael L. Battles	Filed herewith
32	Section 1350 Certifications	Filed herewith
101	The following materials from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows, (v) Consolidated Statements of Stockholders' Equity and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text	(24)
104	Cover page from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, formatted in iXBRL and contained in Exhibit 101.	

---

* A “management contract or compensatory plan or arrangement” filed as an exhibit to this report pursuant to Item 15(a)(3) of Form 10-K.

(1) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on February 28, 2002.

(2) Incorporated by reference to the similarly numbered exhibit to the Company's Form 10-K Annual Report for the Year ended December 31, 2001.

(3) Incorporated by reference to the similarly numbered exhibit to the Company's Form 10-Q Quarterly Report for the Quarterly Period ended March 31, 2002.

(4) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on September 25, 2002.

(5) Incorporated by reference to the similarly numbered exhibit to the Company's Form 10-Q Quarterly Report for the Quarterly Period ended June 30, 2003.

(6) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on October 31, 2012.

(7) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on May 19, 2005.

(8) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on May 12, 2011.

(9) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on December 22, 2014.

(10) Incorporated by reference to prospectus supplement dated November 28, 2012 filed on November 28, 2012 under the Company’s Registration Statement on Form S-3 (File No. 333-185141).

(11) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on October 30, 2020.

(12) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on November 2, 2016.

(13) Incorporated by reference to the similarly numbered exhibit to the Company’s Form 8-K Report filed on June 30, 2017.

(14) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on April 17, 2018.

(15) Incorporated by reference to the similarly numbered exhibit to the Company's Report on Form 8-K filed on July 20, 2018.

(16) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on July 3, 2019.

(17) Incorporated by reference to the similarly numbered exhibit to the Company’s Form 10-Q Quarterly Report for the quarterly period ended March 31, 1999.

(18) Incorporated by reference to the similarly numbered exhibit to the Company's Form 10-K Annual Report for the Year ended December 31, 2010.

(19) Incorporated by reference to Appendix B to the Company’s definitive proxy statement for its 2017 annual meeting of shareholders filed on April 26, 2017.

(20) Incorporated by reference to the similarly numbered exhibit to the Company's Form 8-K Report filed on January 11, 2016.

(21) Incorporated by reference to Appendix A to the Company’s definitive proxy statement for its 2019 annual meeting of shareholders filed on April 24, 2019.

(22) Incorporated by reference to Appendix A to the Company’s definitive proxy statement for its 2020 annual meeting of shareholders filed on April 24, 2020.

(23) Incorporated by reference to the similarly numbered exhibit to the Company’s Form 8-K Report filed on June 3, 2020.

(24) These interactive data files are furnished herewith and deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

Subsidiaries of Clean Harbors, Inc.

Subsidiary	Jurisdiction of Organization
Altair Disposal Services, LLC	Delaware
Baton Rouge Disposal, LLC	Delaware
Bridgeport Disposal, LLC	Delaware
CH International Holdings, LLC	Delaware
Clean Harbors Andover, LLC	Delaware
Clean Harbors Aragonite, LLC	Delaware
Clean Harbors Arizona, LLC	Delaware
Clean Harbors Baton Rouge, LLC	Delaware
Clean Harbors BDT, LLC	Delaware
Clean Harbors Buttonwillow, LLC	Delaware
Clean Harbors Canada, Inc.*	New Brunswick
Clean Harbors Caribe, Inc.*	Puerto Rico
Clean Harbors Chattanooga, LLC	Delaware
Clean Harbors Clive, LLC	Delaware
Clean Harbors Coffeyville, LLC	Delaware
Clean Harbors Colfax, LLC	Delaware
Clean Harbors Deer Park, LLC	Delaware
Clean Harbors Deer Trail, LLC	Delaware
Clean Harbors Development, LLC	Delaware
Clean Harbors Disposal Services, Inc.	Delaware
Clean Harbors El Dorado, LLC	Delaware
Clean Harbors Energy and Industrial Services Corp.*	Alberta
Clean Harbors Energy and Industrial Services LP*	Alberta
Clean Harbors Energy and Industrial Western Ltd.*	Alberta
Clean Harbors Energy Services ULC*	Alberta
Clean Harbors Environmental Services, Inc.	Massachusetts
Clean Harbors Exploration Services, Inc.	Nevada
Clean Harbors Exploration Services, ULC*	Alberta
Clean Harbors Exploration Services LP*	Alberta
Clean Harbors Florida, LLC	Delaware
Clean Harbors Grassy Mountain, LLC	Delaware
Clean Harbors India LLP*	India
Clean Harbors Industrial Services Canada, Inc.*	Alberta
Clean Harbors Industrial Services, Inc.	Delaware
Clean Harbors Innu Environmental Services, Inc.	Newfoundland
Clean Harbors Kansas, LLC	Delaware
Clean Harbors Kingston Facility Corporation	Massachusetts
Clean Harbors LaPorte, LLC	Delaware
Clean Harbors Laurel, LLC	Delaware
Clean Harbors Lodging Services LP*	Alberta
Clean Harbors Lodging Services, ULC*	Alberta
Clean Harbors Lone Mountain, LLC	Delaware

Clean Harbors Mercier, Inc.	Quebec
Clean Harbors of Baltimore, Inc.	Delaware
Clean Harbors of Braintree, Inc.	Massachusetts
Clean Harbors of Connecticut, Inc.	Delaware
Clean Harbors Pecatonica, LLC	Delaware
Clean Harbors Production Services, ULC*	Alberta
Clean Harbors Quebec, Inc.*	Quebec
Clean Harbors Recycling Services of Chicago, LLC	Delaware
Clean Harbors Recycling Services of Ohio LLC	Delaware
Clean Harbors Reidsville, LLC	Delaware
Clean Harbors San Jose, LLC	Delaware
Clean Harbors San Leon, Inc.	Delaware
Clean Harbors Services, Inc.	Massachusetts
Clean Harbors Surface Rentals, ULC*	Alberta
Clean Harbors Surface Rentals Partnership*	Alberta
Clean Harbors Surface Rentals USA, Inc.	Delaware
Clean Harbors Tennessee, LLC	Delaware
Clean Harbors Westmorland, LLC	Delaware
Clean Harbors White Castle, LLC	Delaware
Clean Harbors Wichita, LLC	Delaware
Clean Harbors Wilmington, LLC	Delaware
Crowley Disposal, LLC	Delaware
Cyn Oil Corporation	Massachusetts
Disposal Properties, LLC	Delaware
Emerald Services, Inc.	Washington
Green View Technologies, Inc.	New Hampshire
EnviroSORT Inc.	Alberta
Grizzco Camp Services, ULC*	British Columbia
GSX Disposal, LLC	Delaware
H20 Environmental, Inc.	Nevada
Hilliard Disposal, LLC	Delaware
Industrial Service Oil Company, Inc.	California
Laidlaw Environmental Services de Mexico S.A. de C.V.*	Mexico
Lonestar Sylvan Inc.*	Canada
Lonestar Vacuum Inc.*	Alberta
Lonestar West Enterprises LLC	Oklahoma
Lonestar West Inc.*	Canada
Lonestar West Services LLC	Nevada
Murphy's Waste Oil Service, Inc.	Massachusetts
Northeast Casualty Insurance Company	Vermont
Plaquemine Remediation Services, LLC	Delaware
Rosemead Oil Products, Inc.	California
Roebuck Disposal, LLC	Delaware
Safety-Kleen de Mexico, S. de R.L. de C.V.*	Mexico

Safety-Kleen Canada Inc.*	New Brunswick
Safety-Kleen Envirosystems Company	California
Safety-Kleen Envirosystems Company of Puerto Rico, Inc.	Indiana
Safety-Kleen, Inc.	Delaware
Safety-Kleen International, Inc.	Delaware
Safety-Kleen of California, Inc.	California
Safety-Kleen Systems, Inc.	Wisconsin
Sanitherm, ULC*	Alberta
Sawyer Disposal Services, LLC	Delaware
Service Chemical, LLC	Delaware
SK D'Incineration*	Quebec
SK Servicios Ambientales Administrativos, S. de R.L. de C.V.*	Mexico
Spring Grove Resource Recovery, Inc.	Delaware
The Solvents Recovery Service of New Jersey, Inc.	New Jersey
Thermo Fluids Inc.	Delaware
Tri-vax Enterprises Ltd.*	Alberta
Tulsa Disposal, LLC	Delaware
Versant Energy Services, Inc.	Delaware
Versant Energy Services, LP*	Alberta
Vulsay Industries Ltd.*	Ontario

*Foreign entity or subsidiary of foreign entity

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-238902 on Form S-8 of our reports dated February 24, 2021, relating to the financial statements of Clean Harbors, Inc. and the effectiveness of Clean Harbors, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
February 24, 2021

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of Alan S. McKim and Michael L. Battles, signing singly, the undersigned's true and lawful attorney-in-fact to:

(1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Clean Harbors, Inc. (the "Company"), any and all documents required by the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934 and the rules thereunder, including, without limitation, Form 10-K;

(2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such document filing and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and

(3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, and in the best interest of, or legally required by, the undersigned.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required with respect to the undersigned's capacity as an officer and/or director and/or holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 24th day of February, 2021.

Signature

/s/ EUGENE BANUCCI

/s/ EDWARD G. GALANTE

/s/ ROD MARLIN

/s/ JOHN T. PRESTON

/s/ ANDREA ROBERTSON

/s/ THOMAS J. SHIELDS

/s/ LAUREN C. STATES

/s/ JOHN R. WELCH

/s/ ROBERT WILLETT

EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Alan S. McKim, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2020 of Clean Harbors, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

/s/ Alan S. McKim

Alan S. McKim
Chairman, President and Chief Executive Officer

Date: February 24, 2021

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Michael L. Battles, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2020 of Clean Harbors, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Michael L. Battles

Michael L. Battles
Executive Vice President and Chief Financial Officer

Date: February 24, 2021

EXHIBIT 32

CLEAN HARBORS, INC. AND SUBSIDIARIES
CERTIFICATION PURSUANT TO
SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES OXLEY ACT OF 2002

Pursuant to 18 U.S.C. §1350, each of the undersigned certifies that, to his knowledge, this Annual Report on Form 10-K for the year ended December 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in this report fairly presents, in all material respects, the financial condition and results of operations of Clean Harbors, Inc.

Date:	February 24, 2021	By:	/s/ ALAN S. MCKIM
			Alan S. McKim
			Chairman, President and Chief Executive Officer
Date:	February 24, 2021	By:	/s/ MICHAEL L. BATTLES
			Michael L. Battles
			Executive Vice President and Chief Financial Officer