

Weirton Steel FY18 Brownfield Cleanup Grant Application

The following application will be updated and submitted as two separate EPA Cleanup Grant Applications. The applications together will request funding for the cleanup asbestos that has been located in 6 structures on Main Street in Weirton, spanning north of the Open Hearth Building.

1. COMMUNITY NEED (16 points)

a. Target Community and Brownfields (6 points)

i. Community and Target Area Descriptions (2 points)

The Mountain State, as West Virginia (WV) has been nicknamed, is located in the rugged Appalachian Mountains of the eastern United States (U.S.). The state was built on natural resource extraction and industry related to coal, petroleum and natural gas, chemical production, glass manufacturing, and primary metals. These industries supported the economy and its residents beginning in the late 1800s. Ernest T. Weir saw the state's resource potential and traveled from the Pittsburgh-area steel empire to create his own in Weirton, WV in 1909. In its prime, Weirton Steel was the largest employer in West Virginia, with 13,000 on the payroll, and the largest taxpayer in the state. However, in the 1980s, foreign competition began to surpass Weirton Steel. An employee buy-out occurred in 1984 and dominated national headlines. The buy-out took Weirton Steel through until the 1990s when the international reorganization of the steel industry resulted in the company's dismantling, bit-by-bit, in front of the community's eyes. Layoffs drove multi-generation, steel-built families out of the area. In 2005, only 2,100 were employed by Weirton Steel and today the count has dwindled to fewer than 1,000.

Weirton is a prime example of a Rust Belt city affected by the industrial decline of the steel industry. With Weirton Steel properties occupying 2,000 centrally located acres of the City of Weirton's 12,000 total acres, 16% of the City is laden with vacant facilities, creating a significant void space that the community is working to revitalize. Weirton's Main Street sits on the Ohio River and while being just 1.5 miles from the border of Southwestern Pennsylvania, 18 miles from the Pittsburgh International Airport and 30 miles from downtown Pittsburgh.

Main Street in Weirton is conjoined with US Route 2, the community's major vehicular thoroughfare, in the southern half of the city. Main Street splits from Route 2 midway through the city and runs parallel to it for .8 miles before reconnecting to it in northern Weirton. The spur of Main Street that is separate from Route 2 has become a focused improvement area for industrial revitalization. Local private and public partners are working to divide parcels, evaluate infrastructure reuse potential, assess sites' environmental needs, and reuse properties with available resources.

Earlier in 2017, community partners addressed one of the properties on Main Street, returning the former Weirton Steel Machine shop to productive use in a matter of months. The 110,000 square foot Machine Shop structure is currently in use by Biddel Oil and Gas. The requested Brownfield Cleanup Funds will target the Open Hearth Building, a 50,000 square foot structure that has approximately 700 feet of frontage on Main Street. The structure is within 200 feet of the Machine Shop Property. The separate structures, together with properties surrounding them along the Main

Street Corridor, are slated for redevelopment as a revitalized mixed-use industrial park.

In the Fall of 2017, the BDC obtained \$300,000 to use for revitalization planning of Weirton Steel Properties. The planning process will further develop revitalization plans for the Main Street Corridor and weave them into revitalization plans to be implemented throughout the city.

ii. Demographic Information and Indicators of Need (2 points)

Weirton’s unhealthy economic climate is a consequence of the steel industry collapse. Issues that continue to err undesirable compared to national standards include dwindling population, incomes, labor force, and home values, along with rising median age, poverty, disability, and ages of homes. Collectively, these issues continue to impact the digressing economy, making the area unappealing for new businesses, professionals, laborers, etc. that may help reverse the area’s negative economic patterns.

Weirton’s population has been steadily decreasing, as population composition has grown in age and instance of poverty and disability since the 1970’s. Between 1970 and 2013, Weirton’s population declined from 27,131 to 19,746, reflecting a 27% population loss. In fact, a large proportion of this loss occurred between 1980 and 2000 when Weirton’s population declined from 24,736 to 20,411, a decrease of 17% of the total population.

The median age of residents in Weirton is 47.4 years, 9.8 years older than the national average of 37.6 years. The poverty rate of 17.2% in Weirton and 16.2% in Hancock County is higher than the national average of 15.5%. Even more alarming is the increase from 14.4% to 30.6% in the number of people under the age of 18 who are below the poverty level over the same 13 year period from 2000 to 2013. From 2000 to 2013 the median age in Weirton increased from 43.5 to 45.7 years. Forty-eight percent of the Blockgroup 540290214004, which surrounds Weirton, is low income (<2x poverty level). Hancock County’s poverty rate at 16.2% is significantly higher than the national rate of 15.5%. Weirton’s rate exceeds both, with a staggering rate of 17.2%. The per capita income in Weirton is only \$25,849 and 13.3% of residents are receiving food stamps/ SNAP benefits. The median household income is \$39,832 compared the national median household income of \$53,889. The disability rates of individuals under 65 years old in Weirton and Brooke and Hancock counties is over 5% higher than the national average of 8.4%.

Weirton Demographic Information

	Weirton City	Hancock County	Statewide	National
Population:	19,746	30,676	1,831,102	316,127,513 ¹
Poverty Rate:	17.2%	16.2%	18.0%	15.5 % ¹
Percent Minority:	5.8%	1.7%	6.4%	37.8% ²
Median Household Income:	\$39,832	\$39,959	\$41,751	\$53,889 ¹
Median House Value:	\$89,300	\$86,400	\$103,800	\$178,600

Population Not In Labor Force	43.5%	42.6%	46.1%	36.3%
Disability Rate Under 65 Years	13.9 %	13.8%	14.2%	8.4%
Median Age	47.4	45.6	41.8	37.6
<i>Source: U.S. Census Bureau. American Factfinder, 2010-2014 American Community Survey 5-Year Estimates</i>				

In Weirton, 43.5% of the population is not in the labor force. This is 7.2% higher than the national average of 36.3%. From 2003 to 2010 Weirton Steel moved from the 5th largest employer in West Virginia to the 67th. In 1980, Weirton Steel employed approximately 14,000, which was 57% of Weirton’s population of 24,736. Thirty years later in 2010, less than 1,000 employees remained at the facility, which translates to only 5% of Weirton’s population of 19,746. Weirton’s workforce has had difficulty rebounding, and this proportion of workers employed by Weirton Steel remains consistent at 5% from 2010 to present.

Another indicator of Weirton’s poor economy is the increasing age of the local housing stock. The housing stock in Weirton is significantly older than the national average. The percentage of homes built in 1979 and earlier in Weirton is 86.9%, nearly 30% higher than the national average of 57%. As of 2013, only 9% of the homes in Weirton were constructed since 1990, more than 20% lower than the national average of 29.2%.

iii. Brownfields and Their Impacts (2 points)

A 1,100 acre footprint of largely vacant infrastructure was left behind from what was, by far, Weirton’s primary employer. This makes the community less attractive for residential development and retention. Vacancy throughout the community creates attractive nuisance and provides opportunity and perception of crime. Asbestos and other harmful materials in the Open Hearth Building and other unmaintained structures, is releasing particulate matter that is causing poor air quality throughout the community. Common contaminants found on Weirton Steel Industrial Complex in Weirton include asbestos, lead, heavy metals, volatile organic compounds (VOCs), and petroleum related contaminants, among others.

The region has unusually high cancer rates, and power plants in the Ohio Valley emit 1,042,805 tons of nitrogen oxide, equivalent to nitrogen oxide emissions from 53 million cars. Adding to this are the emissions from upwind power plants, resulting in 2,849,190 million tons of this pollution—or the equivalent of 146 million cars. EPA’s “Envirofacts” website clearly documents the elevated number of other sources that are potentially contributing to environmental (soil, surface water, groundwater, and air quality) and related health problems, including 242 registered air emission sites, 149 toxic release sites, 77 Greenhouse Gas sites, 50 Toxic Substances Control Act sites, 2,608 RCRA hazardous waste sites, and 3,709 permitted water discharge sites with either direct or tributary discharges into the Ohio River.

b. Welfare, Environmental, and Public Health Impacts (6 points)

i. Welfare Impacts (2 points)

Weirton has a cluster of abandoned buildings on Main Street, including the 88,000-square foot Open Hearth building. The structures are run-down, intimidating in size and pose serious threats to the safety of community members in the city of Weirton. The Open Hearth structure specifically, is contaminated with asbestos and is hindering the clean-up and revitalization project of Weirton. This troublesome vacancy trend has now spread past the industrial main street of Weirton and has extended into commercial, public and residential areas of town. There is an estimated 8.4% of abandoned housing units in the city of Weirton.

Expand on blight, safety, and lack of services

ii. Cumulative Environmental Issues (2 points)

Weirton is subject to the air emissions from the many industries located in and near the Ohio River Valley. Ozone levels in the Ohio River Valley are impacted by multiple power plants along the river, as well as by upwind power plants. Power plants in the Valley emit 1,042,805 tons of nitrogen oxide, equivalent to nitrogen oxide emissions from 53 million cars (source?). Adding to this are the emissions from upwind power plants resulting in 2,849,190 tons of this pollution, or the equivalent of emissions from 146 million cars. This combination of emissions has negative ramifications on air quality in the region.

Weirton falls within a region that historically has failed the EPA air-quality requirements for ozone, coarse particulate matter, sulfur dioxide, and radon. "Bad" ozone, evaluated by the Ozone 8-hour 1997 EPA Standard, can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma. The Weirton area did not meet the particulate matter air quality standard, also known as PM_{2.5} 24-hour 1997 and 2006 EPA Standards. In 2010 Weirton and Steubenville's annual concentration of 47 µg/m³ failed to meet the national standard of 35 µg/m³. Particulate matter is a complex mixture of extremely small particles and liquid droplets comprised of acids, organic chemicals, metals, and dust that have been linked to premature death in people with heart/lung disease, nonfatal heart attacks, irregular heartbeat, asthma, decreased lung function, and respiratory irritation, coughing, and shortness of breath (<https://www.epa.gov/so2-pollution>, <https://www.epa.gov/green-book>). Additionally, the region failed the 2010 sulfur dioxide air-quality standard with a concentration of 117 ppb, which failed to meet the national standard of 75 ppb. High concentrations of sulfur dioxide, even with short-term exposure, increase visits to emergency departments and hospital admissions for respiratory illnesses, particularly in at-risk populations including children, the elderly, and asthmatics (<https://www3.epa.gov/airquality/greenbook/tbtc.html>). Radon exposure is the second leading cause of lung cancer in the U.S and according to the USEPA, Hancock and Brooke counties fall within Zone 1 for Radon. Homes in the Weirton area are predicted to have an average indoor radon screening above 4 pCi/L. Homes in this zone that test at 2-4 pCi/L are recommended for remediation to reduce the risk of lung cancer. (<http://air-quality-by-city.findthedata.com/1/35/Weirton-WV-Steubenville-OH>).

i. Cumulative Public Health Impacts (2 points)

In 2015, 9.5% of residents did not have health insurance in Weirton which creates a serious vulnerability issue as high concentrations of radon, sulfur-dioxide, particulate matter, and bad ozone, along with other environmental issues, compounded with the negative impact of brownfield presence such as the Open Hearth Building in Weirton has clearly had a detrimental effect on the health of residents. This is illustrated local statistics relating to local causes of death relating to various illnesses, overall hospital visits, and instances of cancer.

In West Virginia, children under the age of three with blood lead levels from 5-9 ug/dL is 3.1% but, in Hancock County the rate more than doubles to 8.2%. Lead causes impaired mental and physical development which leads to deficient academic performance.

A report completed in 2013, by the Weirton Medical Center (WMC), which included fourteen zip codes surrounding Weirton as their service area, found that in 2008 the service area had higher and more negative rates for causes of death in 11 different categories (compared to national averages) including: heart disease, cancer, strokes, chronic lower respiratory diseases, accidents, Alzheimer's disease, diabetes, influenza/pneumonia, liver diseases, suicide, and septicemia. Forty-four percent of all patient discharges from WMC were from the Weirton zip code, where only 6% of the total WMC service area's population lives. (<http://www.weirtonmedical.com/pdfs/WMC-2013-Assessment.pdf>).

In 2010, a comparison of the WMC service area to the national average indicated that the highest percentage of causes of death included heart disease (41% higher than the national average), chronic lower respiratory diseases (50% higher), septicemia (60% higher), cancer (30% higher), liver disease (45% higher), strokes (37% higher), and influenza/pneumonia (31% higher).

The national cancer rate of new cases for men and women was 454.8 per 100,000 residents (2008-2012 [reference study here](#)). In WV that rate was even higher at 497.8 per 100,000 residents, and in Hancock County it was significantly higher at 559.7 per 100,000 residents. The 2008-2012 national cancer rate for men only was at 516.8 per 100,000 residents, even higher in West Virginia at 577.5 per 100,000 residents. A similar trend occurred with women, where the national rate was at 411.2 per 100,000 residents, while West Virginia women showed 442.6 new cases per 100,000 residents. ([reference here](#))

c. Financial Need (4 points)

i. Economic Conditions (2 points)

The Business Development Corporation (BDC), the site owner, receives revenue from property sales and leases through its role as the Regional Economic Development Authority to be able to support investment into demolition and redevelopment activities. Considering the capacity and overall priorities of the BDC, there is simply not enough revenue to tackle the environmental clean-up associated with the needed remediation activities without additional investment from public and private sources. High unemployment and poverty rates negatively impact public funds as they lead to the inability of counties and municipalities to collect additional revenues.

ii. Economic Effects of Brownfields (2 points)

The Open Hearth Building is one of many abandoned structures in close proximity to neighborhoods where residents can be exposed to contaminants. Like the Open Hearth Building, the other properties have been left by the 20-year decline in the steel, pottery, and glass-making industries. The cumulative local effect of this decline has been devastating and have resulted in a significant decline in tax revenue, a stagnant economy with little or no investment in redevelopment, unemployment rates higher than the national average, a median household income lower than the national average, a population decline from 28,201 in 1960 to 19,634 today, along with the threats posed from large abandon, polluted structures.

The City of Weirton must now respond to the impact of the decline of these industries. A population already facing negative impacts of the recession in 2008 and continues to feel the impacts of both economic disruptions. Continued job loss in the manufacturing sector is projected in Weirton through 2020 (source?). The areas high poverty and unemployment rates effect the ability of local municipalities to collect sufficient income tax revenues to support the current system.

2. PROJECT DESCRIPTION AND FEASIBILITY OF SUCCESS (30 points)

a. Project Description (15 points)

i. Existing Conditions (2 points)

The 88,000 square foot Open Hearth Building and the 15,000 square foot Ladle House Building (hereafter referred to as the "Buildings") was formerly used by Weirton Steel for steel manufacturing activities. The Buildings sit on an (parcel size) acre parcel that is part of the 1100 acre Weirton Steel industrial complex.

A staff of approximately 40 laborers, hired by Frontier Industries, the owner of the majority of Weirton Steel properties, is currently working to disassemble and scrap materials from unusable structures and infrastructure, primarily to the South of the Buildings. There is a cluster of buildings North of the Buildings that are currently undergoing assessment and reuse planning. The Open Hearth Building is the highest priority within the cluster for cleanup and reuse because of its impact on local air quality as well as its reuse potential.

The Building has been vacant since 2007. (Insert data from pending Environmental Site Assessment). Further, the Building is open on two ends, allowing particulates to waft throughout the property, adjacent street, and surrounding community. The Building has x linear feet of frontage on Main Street, causing it to have a significant impact on the community's environment and also making it a valuable, accessible facility for industrial redevelopment. At x square feet, the Building is the largest within the cluster of potential reusable structures. The Building is also across the Main Street Corridor from the recently redeveloped Biddel Oil and Gas facility. Therefore, the remediated structure will be part of a revitalized industrial complex within the city.

ii. Proposed Cleanup Plan (8 points)

See ABCA

iii. Alignment with Revitalization Plans (5 points)

The BDC participates in the Brooke Hancock Jefferson Brownfields Task Force, which meets quarterly to coordinate brownfield planning and redevelopment efforts as well as discuss the pursuit and management of brownfield projects and grants. The Task Force completed a Comprehensive Economic Development Strategy in 2015 that identifies downtown revitalization in Weirton as a priority project. Revitalization of Former Weirton Steel Properties is the City of Weirton's top economic development and revitalization priority, as the sites dominate the community. In October 2017, the BDC, in partnership with the City of Weirton, secured \$300,000 in U.S. Economic Development Authority funds and \$100,000 in City of Weirton funding for reuse planning of underutilized portions of Weirton Steel properties. Project partners are working to develop plans for the Former Weirton Steel Properties to be redeveloped as a mixed use campus with industrial facilities for value added metals, chemical companies, and energy companies as well as a transportation logistics hub, healthcare facilities, offices, and retail stores.

Weirton Steel properties were owned by Arcelor Mittal Steel until recently. In the Summer of 2017, Arcelor Mittal sold the majority of Weirton Steel Properties, totaling 1,100 acres, to Frontier Industries, a company that has been a cooperative partner with the BDC and other local organizations. With the property transfer has come new opportunities for community revitalization. The BDC has been in close contact with management at Frontier Industries to set redevelopment priorities, etc. As local partners are working to coordinate efforts to manage the significant revitalization planning project, BDC, the City of Weirton, and Frontier Industries is working to deconstruct unusable infrastructure as well as update reusable infrastructure. Earlier in 2017, the BDC obtained ownership of the former Weirton Steel Machine Shop, which was repaired and leased to Biddel Oil and Gas in a few months' time. While the Machine Shop was listed for sale, entities including Southwestern and Marathon expressed interest in leasing the structure. The BDC is working to reuse additional structures based on this perceived market need. The Open Hearth Building Cleanup will lead to local sustainable and equitable development by engaging the community to provide input through the redevelopment process that will provide new jobs in a vacant facility.

Partnering entities are in pursuit of WV Development Office Industrial Access Road funding for improvements to Main Street in Weirton, which is adjacent to the Buildings. Therefore, the reused Open Hearth Building will be part of a central corridor of revitalized industrial property that will be part of local partners' redevelopment plans for mixed use development in the community.

b. Task Descriptions and Budget Table (10 points)

Task 1- Programmatic Oversight (TOTAL BUDGET: \$21,000): BDC expects to spend 650 total hours on program management at \$30/hour. Totaling \$19,500, BDC will provide these services in-kind as part of its required cost share. Additionally, as part of our cost share, we have included a cost of \$1,500 for one BDC staff member to travel to the Annual West Virginia Brownfields Conference, one Council of Development Finance Agencies (CDFA) summit, or the EPA National Brownfields Conference under this task (or combination thereof). This includes \$500 for transportation, \$800 for hotel accommodations, and \$200 for meals for two people for two nights each.

Task 2- Community Involvement (TOTAL BUDGET: \$4,000): The total amount budgeted for this task is \$4,000. The entire amount will be paid by the BDC as part of our cost share. \$4,000 will be used for space to hold meetings in the community. The BDC will contribute cash and/or in kind services for the development of informational materials, lease space for the community meetings, and to assist with outreach and community development. The BDC will select a contractor through a competitive bid process, make all the appropriate notifications and announcements, and brief the BDC Board, Council, and Community regularly throughout the process.

Task 3-Site Clean-up (TOTAL BUDGET: \$205,000): Qualified contractors will be selected through a competitive bid process to complete the remediation of the site. Remedial alternatives were developed in the attached ABCA. The cleanup will include the removal of ACMs to be disposed of at a permitted off-site facility. The grant amount requested for Task 3 Site Clean-up is \$205,000.

Task 4-Reuse Planning (TOTAL BUDGET: \$10,000): The BDC will work with management at neighboring industrial facilities, neighboring residents, and community interest groups to create a strategic neighborhood revitalization plan that will address the negative aspects that the Former Newell Porcelain Facility is having on the neighborhood. \$10,000 in grant funds are requested for of this design. The BDC will select a contractor through a competitive bid process, make all the appropriate notifications and announcements, and brief the BDC Board, Council, and Community regularly throughout the process.

i. Budget Table (3 points)

Budget Categories	Project Tasks (\$) (programmatic costs only)				Total
	Task 1 – Programmatic Oversight	Task 2 – Community Involvement	Task 3 – Site Cleanup	Task 4 – Reuse Planning	
Personnel					
Fringe Benefits					
Travel ¹					

Equipment ²					
Supplies					
Contractual			\$190,000	\$10,000	\$200,000
Other (include subawards) (specify)					
Total Federal Funding (not to exceed \$200,000)			\$190,000	\$10,000	\$200,000
Cost Share (20% of requested federal funds)³	\$21,000	\$4,000	\$15,000		
Total Budget	\$21,000	\$4,000	\$205,000		
¹ Travel to brownfield-related training conferences is an acceptable use of these grant funds. ² EPA defines equipment as items that cost \$5,000 or more with a useful life of more than one year. Items costing less than \$5,000 are considered supplies. Generally, equipment is not required for Cleanup Grants. ³ Applicants must include the cost share in the budget even if applying for a cost share waiver. If the applicant is successful and the cost share waiver is approved, it will be removed in pre-award negotiation. Reminder: Administrative costs, such as indirect costs, of grant administration with the exception of financial and performance reporting costs are ineligible grant activities.					

c. Ability to Leverage (5 points)

Leveraging Resources (supplement as appropriate using additional rows or text).

Source	Purpose/Role	Amount (\$)	Status (Secured resource with attached documentation, pending, or potential resource)
The Northern WV Brownfields Assistance Center	In-kind services towards the management of the cooperative agreement		Secured resource
WV Development Office – Industrial Access Road Funding	Improve site access through the redevelopment of Main Street	\$400,000	Pending Resource
End User (value added metal company or chemical/energy company), TBD	Lease or purchase the property upon site cleanup		Potential resource

3. COMMUNITY ENGAGEMENT AND PARTNERSHIPS (20 points)

The abundance of vacant and blighted land that has taken over Weirton will be tackled with a BDC lead initiative. As the BDC works to manage the Weirton Steel Revitalization Planning project with recently acquired US EDA funding, various community interest groups and stakeholders will be engaged in a community design process that will focus on the subject property as well as other properties formerly occupied by Weirton Steel.

The BDC will create a comprehensive reuse plan for viable manufacturing and mixed-use community development throughout Weirton. The City of Weirton will partner with the BDC to target the numerous closed steel facilities, including the Open Hearth Building, which will open these sites up for re-use to interested parties in the Oil and Gas industries. Frontier, who recently purchased the Open Hearth Building and other Arcelor Mittal properties has entered into cooperation with these forces to revitalize these previously neglected sites. Frontier is well known nationally for its large-scale industrial and commercial facility reuse, materials cycling, industrial land purposing, brownfield and real estate development, and energy production.

The BDC works closely with the Brooke-Hancock Brownfield Redevelopment Task Force (BHBTF): a group comprised of local city officials, community members, business people, site-adjacent residents, and civic leaders that formed in 2009 that inventories, assesses, and prioritizes brownfields in Brooke and Hancock counties. BHBTF has successfully guided the redevelopment of other sites, such as Three Springs Business Park, Half Moon Industrial Park, a variety abandoned gas stations, and the former Jimmy Carey Stadium. The BHBTF was a key driver in the public involvement process, helping to invite the community to public meetings and to share comments, and sharing information on the widely used community Facebook page.

a. Engaging the Community (8 points)

All progress and news updates will be made available online at the BDC's website, including links to online press releases and news stories. The BDC will also actively use its existing presence on social media (Facebook and Twitter) to communicate project updates and meeting reminders with local citizens. Additionally, local media representatives are invited to and frequently attend BHBTF meetings and report to the greater community on its progress.

The BDC participates in quarterly meetings with the Brooke-Hancock Brownfields Task Force (BHBTF) and The West Virginia Northern Brownfields Assistance Center. These meetings will be utilized to present the clean-up method, share news during and after the cleanup, and coordinate with local media to provide updates to the community. Media sources may include but are not limited to *The Review*, *Hancock County Courier*, and *Weirton Daily Times*.

b. Partnerships with Government Agencies (5 points)

Government agencies partnering on this project include the Brooke-Hancock-Jefferson Metropolitan Planning Commission, the Brooke-Hancock Jefferson Metropolitan Planning and

Commission, The City of Weirton, and The West Virginia Department of Environmental Protection. The WVDEP fully supports the BDC’s revitalization efforts in Weirton which will enhance the community and the environment. The BDC also works closely with the WVDEP’s Department of Land Revitalization and Division of Air Quality to ensure that all air and water quality standards are upheld during the environmental cleanup activities.

Partnerships with Government Agencies			
<u>Name/Title</u>	<u>Organization</u>	<u>Activities</u>	<u>Telephone No.</u>
Casey Korbini, Project Manager	WVDEP- Division of Land Restoration	State Brownfields Authority	304-926-0499
Michael Paprocki, Director	Brooke-Hancock Jefferson Metropolitan Planning Commission	Regional Brownfields Partner	304-797-9666
Hancock County			
City of Weirton			

c. Partnerships with Community Organizations (5 points)

- i. Community Organization Description & Role (3 points)
- ii. Letters of Commitment (2 points)

The BDC is working to coordinate all project efforts with a variety of community-based organizations, including the local churches near the Open Hearth Structure. These community composed groups all share the drive and desire to improve their community through revitalization efforts and encouraging new business development that will restore the economy in Weirton. They support the BDC and will assist by sharing community input and spreading positive perspective throughout the community regarding the restoration project.

**** Table Needs Updated and Reviewed!****

Community-based Organization Partners				
<u>Name/Title</u>	<u>Organization</u>	<u>Role</u>	<u>Commitment</u>	<u>Contact</u>
Patrick Kirby	Northern WV Brownfields Assistance Center	Brownfields expertise and technical assistance	500 hours/\$20,00 0 value	304.293.6984

?	BDC ?	Community Involvement	\$4,000 in meeting space	?
?	BHBTf ?	Community Involvement	Hours media and public relations	?

d. Partnerships with Workforce Development Programs (2 points)

e.

The BDC will select qualified contractors through a competitive bid process to complete remediation of the site.

4. PROJECT BENEFITS (14 points)

This section of your proposal describes the anticipated outcomes and benefits expected from your project(s) in the context of the needs you discussed in the Community Need section.

Your proposal will be evaluated on the quality and extent to which it:

- Demonstrates the potential of the project(s), or the development plan for the project area(s), to realize significant outcomes and benefits to the public health, welfare and environment of the community;
- Contributes to the community plan for the revitalization of brownfield sites; and
- Stimulates economic or non-economic benefits.

a. Welfare, Environmental, and Public Health Benefits (8 points)

Describe the future welfare, environmental, and public health benefits anticipated from this grant (or broader project), and how these benefits will address the challenges and sensitive populations discussed in the Community Need section of your narrative.

The cleanup of the Open Hearth and Ladle House Buildings will improve the health and welfare of residents directly through the removal and mitigation of asbestos contaminants. Removing the asbestos contamination on the site will improve the safety of all members in the community as this property sits adjacent to local businesses and churches. There are homes less than 500 feet from the site’s boundary. Environmental outcomes will include the removal and stabilization of site contaminants, improved air, soil and surface water quality around the site.

Correcting the vacancy trend will start with the revitalization of the industrial buildings found along Main Street which provide the infrastructure for business development and the sequential need for housing.

Redeveloping this site will contribute largely to the BDC’s focus on restoring the Weirton City industrial corridor to economic use. This site accounts for _____ area of the _____ area included in the redevelopment process. After cleanup, this revitalization will represent a huge milestone in the BDC’s target corridor and vastly improve the quality of life in Weirton.

Removing the asbestos will improve the safety of the city as well improve the health and welfare of the residents, many of whom are especially vulnerable to these types of contaminants.

According to the Agency for Toxic Substances and Disease Registry ("Sensitive Populations and Chemical Exposure," 2009), individuals over the age of 65 often have weaker immune systems and tend to have more sensitive lungs, making fighting off health effects from breathable contaminants challenging. In Weirton, where the median age is 47.6 compared to the 37.4 national average, environmental hazards such as asbestos pose a very serious threat to the majority of the population.

This grant to revitalize The Open Hearth Building will ensure an asbestos free facility, guarantee that hazardous waste will be properly removed and disposed of, and reopen this facility for business development and economic contribution. The reuse of this site will provide an estimated 138 jobs for residents. These new jobs and the buildings new use will raise property values and will reduce the number of abandoned homes in Weirton which will in turn continue the increases property value trend. Eliminating vacant structures and providing the community with jobs will also reduce the number of residents on food stamps, increase median household income and re-establish the need for business growth in hospitality, finance and recreation.

b. Economic and Community Benefits (6 points)

The cleanup grant will make it possible for this massive structure to support an estimated 138 jobs in Weirton after its renovation. The structure will be used largely for the expansion of Frontier and its business ventures. These job opportunities will increase the median household income and reduce the level of poverty found in the homes of Weirton.

5. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE (20 points)

The BDC was formed in 1993 and chartered as a 501(c)(3) organization. The BDC is the designated economic development organization for Brooke and Hancock counties and is supported financially by the WV Development Office, WV Economic Development Authority, USEDA, USEPA, Benedum Foundation, private investors, Brooke County Commission, Hancock County Commission, and the municipal governments of Bethany, Beech Bottom, Weirton, New Cumberland, and Chester. The project director of this EPA Cleanup Grant for The Lodge site will be Patrick Ford, the BDC's Executive Director and Project Manager. Mr. Ford has 25 years of experience in project management, land development, and economic and community development. He has worked as a development executive in WV, Pennsylvania, Virginia, Maryland, and Florida. Mr. Ford holds both Bachelor's and Master's degrees in city planning from the University of Virginia, and is a graduate of Leadership West Virginia. Ford has been recognized as "Who's Who Top Entrepreneurs in West Virginia" by the *West Virginia Business Journal*.

Marvin Six is the Assistant Director and Assistant Project Manager of the BDC. Mr. Six has 35 years of experience in corporate management and 15 years in economic and community development in WV. Mr. Six holds a Bachelor's Degree in Business Management and Master's Degree in Industrial Safety from WV University, and is a graduate of the University of Pittsburgh Katz Graduate School Entrepreneurial Fellows Center.

Beyond the skills of staff and board of the BDC (which includes a balance of professionals from the private and public sectors), the BDC regularly retains professionals for a contractual services in project development, civil and structural engineering, site assessment, planning, accounting, and contract law.

If the BDC were to contract additional necessary expertise, it would contract such professionals via standard procurement procedures that meet all state and federal guidelines and have been employed in the past. The procedures include soliciting statements of qualifications and price proposals to be reviewed by the staff and executive board of the BDC. The BDC will engage a WV Licensed Remediation Specialist (LRS) to perform the specific assessment work on The Lodge, under supervision from the WVDEP.

a. Audit Findings [2 points]

The BDC has not had any adverse audit findings. On an annual basis, the BDC obtains an independent audit to validate its financial affairs. The BDC complies with the OMB Circular A-133 that requires recipients that expend \$300,000 or more in total Federal funds. For the 2012 USEPA cleanup grant, quarterly reports were filed on or before due dates and no ineligible costs were noted. The BDC and its officers, on a monthly basis, formally review and approve vouchers and expenses.

b. Past Performance and Accomplishments [6 points]

i. Currently or Has Ever Received an EPA Brownfields Grant [6 points]

1. Compliance with Grant Requirements (3 points)

In 2012, the BDC was awarded a \$200,000 USEPA cleanup grant for the TS&T site. The BDC was in full compliance with this grant's work plan, schedule, and terms and conditions. While the grant was originally planned for a three year period, **the work was completed within one year by special request from the EPA**. Grant dollars have been fully expended and the grant has been closed out.

The BDC was the recipient of three Targeted Brownfields Assessment (TBA) grants for three specific properties in 2014. The BDC was awarded \$225,000 for the former Wheeling Corrugating Plant property located in Beech Bottom, WV; \$70,000 for the former Brooke Glass site in Wellsburg; and \$90,000 for the Jimmy Carey Stadium located in Weirton. The BDC was awarded a USEPA Cleanup grant for the Wheeling Corrugating Plant and Brooke Glass in 2015. The grant period for these two cleanup grants is October 1, 2015 to November 30, 2018. We are currently preparing an RFP to solicit contractors to perform the cleanup work. Work will be completed in the grant period. The BDC was also awarded \$70,000 through a 2014 USEPA Site-specific Assessment grant for the TS&T riverbank property in 2014. The assessment work has been completed. The BDC also received a USEPA Cleanup grant for the TS&T riverbank in 2015. The grant period for this cleanup grant is October 1, 2015 to November 30, 2018. We are currently working with the WVDEP to develop an acceptable approach to remediate the riverbank while preserving the hillside on the river's edge. Once an approach is approved by WVDEP, the BDC will solicit contractors to perform the cleanup work. The work will be completed in the grant period.

2. Accomplishments (3 points)

The USEPA produced a podcast on the work of the BDC that aired at the 2015 National Brownfields Conference, illustrating the BDC approach as a model for other communities. One example highlighted in the podcast was the cleanup and redevelopment of the former TS&T site in Chester, WV. The project achieved the following outcomes: 1) The original \$5,000 investment leveraged over \$1,300,000 from 14 funding streams to remediate the site; 2) Community input and support were garnered from almost two dozen meetings; and 3) The project won a competitive grant from the WV Redevelopment Collaborative from WVU and the Benedum Foundation.

DRAFT

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL B (BOTTOM HOUSE)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

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FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report
Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel B – Bottom House (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 0.38 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former Bottom House, a 16,500 square foot steel-framed and sided structure with concrete foundations and floors. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Bottom House was constructed in the early 1900s as part of the former Weirton Steel facility. The building was historically used to replace refractory in ladles used to transport molten iron from the nearby blast furnaces to the open hearth furnace. The iron and steel making operations of the facility ceased around 2011 and the Bottom House has remained vacant since that time.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. Twenty (20) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in six samples associated primarily with pipe wrap/insulation. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-contaminated debris that will result from the demolition of the ticket booth will be disposed at an off-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$57,000
Third Party Air Sampling.....	\$1,000
Project Management	\$2,000
Total	\$61,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

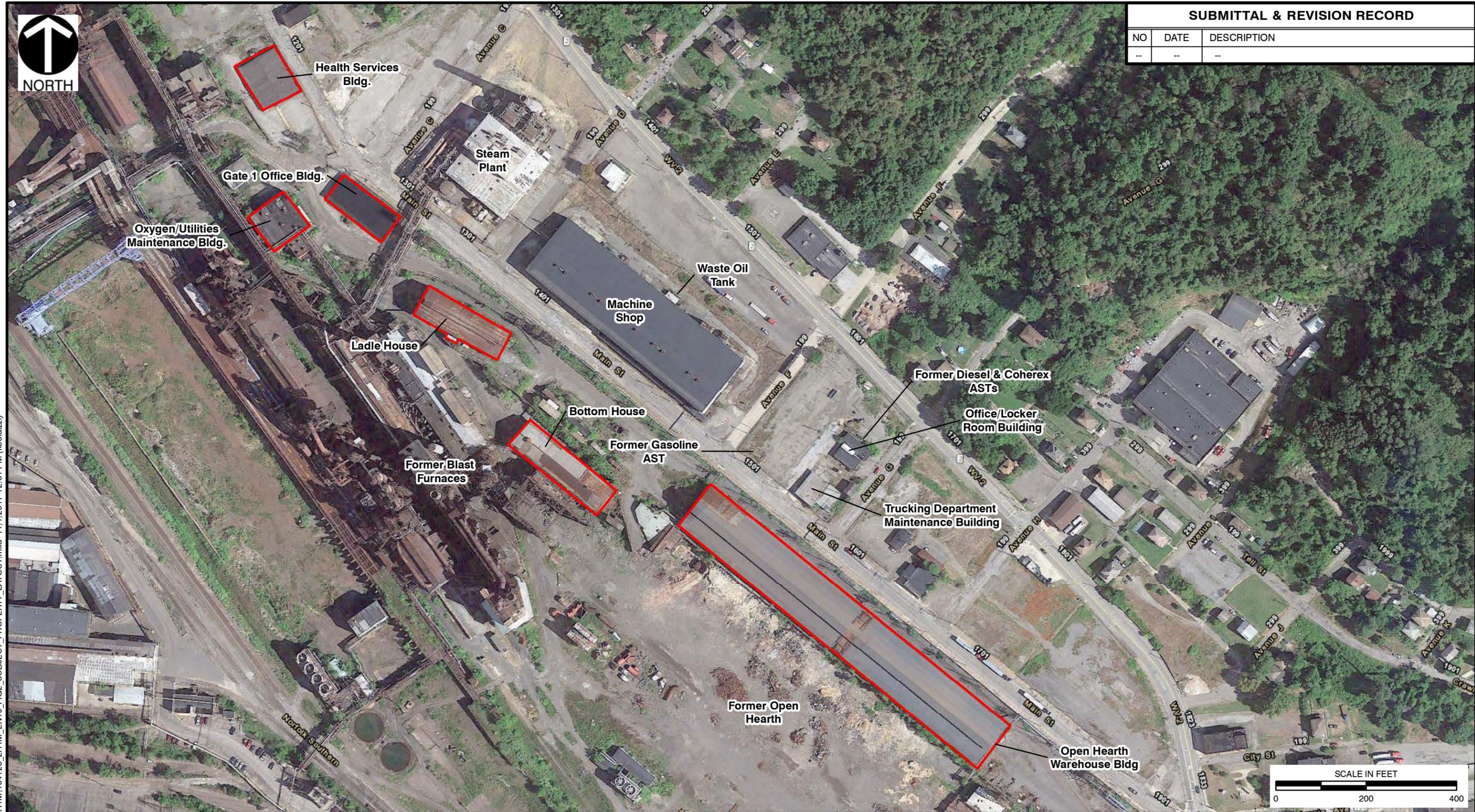
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.


Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M\EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

APPENDIX A
EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
BOTTOM STOVE BUILDING
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX
midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

November 2, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Bottom Stove Building

To Whom It May Concern:

On Thursday, October 19th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Former Bottom Stove Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement and / or demolition activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Edgar J. King'.

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink, appearing to read 'Tim Daniels'.

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings - Former Bottom Stove Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Bottom Stove Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Bottom Stove Building was un-occupied and in poor condition. There was no access to the rooftop at this time although it visually appeared to be the same metal as the rest of the building with no visible signs of tar. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials that may impact planned future demolition of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building. A total of nine (9) samples, (20) including splits were collected at this time. Of those samples, six (6) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B- for Sample Location Diagram.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
Black Tar Paper	Bottom Stove Building 12" Wrapped Lines	250 Ln Ft	Non-Friable	55 % Chrysotile
Grey Insulation	Bottom Stove Building 12" Wrapped Lines	250 Ln Ft	Friable	60 % Chrysotile

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

North End Buildings - Former Bottom Stove Building

Refer to appendices for further information.

Appendix A—Building Inspection Results

Appendix B—Sample Location Diagram

Appendix C—Laboratory Analysis Results

Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— November 2, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Bottom Stove Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the rooftop) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonsia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Bottom Stove Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	460 Ln Ft (A)	Poor	High	None
01B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None
02A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	(A)	Poor	High	None
02B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None
03A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	(A)	Poor	High	None
03B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None
04A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	(A)	Poor	High	None
04B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None
05A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	(A)	Poor	High	None
05B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonsia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Bottom Stove Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
06A	Bottom Stove Building 4" Steam Lines	Black Tar Paper	(A)	Poor	High	None
06B	Bottom Stove Building 4" Steam Lines	White Insulation	(A)	Poor	High	None
07A	Bottom Stove Building 12" Wrapped Lines	Black Tar Paper	250 Ln Ft (B)	Poor	High	55 %
07B	Bottom Stove Building 12" Wrapped Lines	Grey Insulation	(B)	Poor	High	60 %
07C	Bottom Stove Building 12" Wrapped Lines	Brown / Black Insulation	(B)	Poor	High	None
08A	Bottom Stove Building 12" Wrapped Lines	Black Tar Paper	(B)	Poor	High	55 %
08B	Bottom Stove Building 12" Wrapped Lines	Grey Insulation	(B)	Poor	High	60 %
09A	Bottom Stove Building 12" Wrapped Lines	Black Tar Paper	(B)	Poor	High	55 %
09B	Bottom Stove Building 12" Wrapped Lines	Grey Insulation	(B)	Poor	High	60 %
09C	Bottom Stove Building 12" Wrapped Lines	Brown / Black Insulation	(B)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-19-17 INSPECTOR: Edgar Kins

CLIENT: CEC

LOCATION: Mingo Junction Steel (Former Bottom stove Bldg)

ADDRESS: Weirton W.V.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain Roof was too high to Access Appeared to be metal

The building is currently Occupied Unoccupied

Like Bldg siding

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1

Main exterior building component (i.e. yellow brick, concrete block, etc...) Metal siding

Please answer yes or no.

Was the basement included? NA Was the attic included? NA

Was the roof included? NO Access Is a map included? yes

Were any areas inaccessible? yes If yes, explain Roof was too high

Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO Tile, Plaster, Caulking, Glazing

Any other important / relevant observations:

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-19-17 INSPECTOR: Edgar Rios

CLIENT: CEC

LOCATION: Mingo Junction steel North End Bldgs (Bottom steel Bldg)

ADDRESS: Winton WU

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain no roof Access, Appeared to be all metal

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1 1/2

Main exterior building component (i.e. yellow brick, concrete block, etc...) Metal siding

Please answer yes or no.

Was the basement included? NA Was the attic included? NA

Was the roof included? NO Is a map included? yes

Were any areas inaccessible? yes If yes, explain Roof Too high to Access

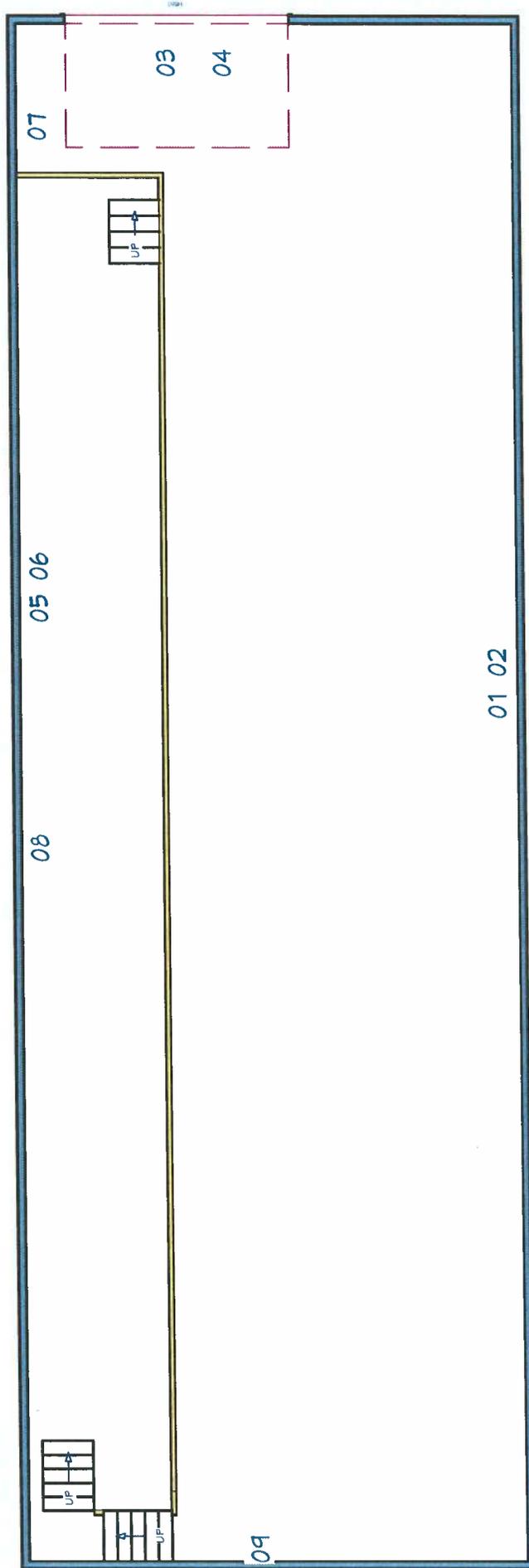
Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO Tile, Plaster, window caulking, Glazing

Any other important / relevant observations:

Appendix B – Sample Location Diagram

Mingo Junction Steel
Bottom Stove Building



Appendix C – Laboratory Analysis Results



5320 N. Pioneer Road
 Gibsonia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101879

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		P/M Asbestos	Standard
09			

Project Site: Mingo Junction steel mill site ^{Bottom} Sampler Signature: [Signature] JN# CEC-17-21
Ally

Client / Address: CEC Phone: _____ Fax: _____

Relinquished By: Edgar King Date: 10-20-17 Time: 0600

Relinquished By: Shelley Burch Date: 10/20/17 Time: 8:05am

Received By (AmeriSci) _____ Date: _____ Time: _____

Additional Information:

- Please indicate Mid Atlantic's job # on all results and invoices
- Email results to midatlantic@zoominternet.net

RECEIVED
 OCT 23 2017
 By AW



Please Reply To:

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

FACSIMILE TELECOPY TRANSMISSION

To: Tim Daniels
Mid Atlantic Environmental Consultants, Inc
Fax #:
Email: MIDATLANTIC@ZOOMINTERNET.NET

From: John S. Shearwood
AmeriSci Job #: 117101879
Subject: PLM 5 day Results
Client Project: CEC-17-21; CEC; Mingo Junction
Steel Weirton Bottom Stove Bldg

Date: Saturday, October 28, 2017
Time: 09:22:30

Number of Pages: 7
(including cover sheet)

Comments:



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MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants,
Attn: Tim Daniels
5320 North Pioneer Road
Gibsonia, PA 15044

Date Received 10/23/17
Date Examined 10/28/17

AmeriSci Job # 117101879
P.O. #
Page 1 of 4

RE: CEC-17-21; CEC; Mingo Junction Steel Weirton Bottom Stove
Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
01 Location: Bottom Stove Bldg 4" Steam Lines Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %	117101879-01L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17
01 Location: Bottom Stove Bldg 4" Steam Lines Analyst Description: White, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Cellulose 40 %, Non-fibrous 60 %	117101879-01L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
02 Location: Bottom Stove Bldg 4" Steam Lines Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %	117101879-02L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17
02 Location: Bottom Stove Bldg 4" Steam Lines Analyst Description: White, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Cellulose 40 %, Non-fibrous 60 %	117101879-02L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
03 Location: Bottom Stove Bldg 4" Steam Lines Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %	117101879-03L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos ReportCEC-17-21; CEC; Mingo Junction Steel Weirton Bottom Stove
Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
03 Location: Bottom Stove Bldg 4" Steam Lines	117101879-03L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: White, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Cellulose 40 %, Non-fibrous 60 %			
04 Location: Bottom Stove Bldg 4" Steam Lines	117101879-04L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %			
04 Location: Bottom Stove Bldg 4" Steam Lines	117101879-04L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: White, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Cellulose 40 %, Non-fibrous 60 %			
05 Location: Bottom Stove Bldg 4" Steam Lines	117101879-05L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %			
05 Location: Bottom Stove Bldg 4" Steam Lines	117101879-05L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: White, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Cellulose 40 %, Non-fibrous 60 %			
06 Location: Bottom Stove Bldg 4" Steam Lines	117101879-06L1	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Other Material: Cellulose 60 %, Non-fibrous 40 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos ReportCEC-17-21; CEC; Mingo Junction Steel Weirton Bottom Stove
Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
06 Location: Bottom Stove Bldg 4" Steam Lines	117101879-06L2	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: White, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Cellulose 40 %, Non-fibrous 60 %			
07 Location: Bottom Stove Bldg 12" Wrapped Lines	117101879-07L1	Yes	55 % (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 55.0 %			
Other Material: Non-fibrous 45 %			
07 Location: Bottom Stove Bldg 12" Wrapped Lines	117101879-07L2	Yes	60 % (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 60.0 %			
Other Material: Non-fibrous 40 %			
07 Location: Bottom Stove Bldg 12" Wrapped Lines	117101879-07L3	No	NAD (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Brown/Black, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 80 %, Cellulose 20 %			
08 Location: Bottom Stove Bldg 12" Wrapped Lines	117101879-08L1	Yes	55 % (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 55.0 %			
Other Material: Non-fibrous 45 %			
08 Location: Bottom Stove Bldg 12" Wrapped Lines	117101879-08L2	Yes	60 % (by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 60.0 %			
Other Material: Non-fibrous 40 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Bottom Stove Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
09 Location: Bottom Stove Bldg 12" Wrapped Lines Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Chrysotile 55.0 % Other Material: Non-fibrous 45 %	117101879-09L1	Yes	55 % (by CVES) by John S. Shearwood on 10/28/17
09 Location: Bottom Stove Bldg 12" Wrapped Lines Analyst Description: Gray, Heterogeneous, Fibrous, Insulation Asbestos Types: Chrysotile 60.0 % Other Material: Non-fibrous 40 %	117101879-09L2	Yes	60 % (by CVES) by John S. Shearwood on 10/28/17
09 Location: Bottom Stove Bldg 12" Wrapped Lines Analyst Description: Brown/Black, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Animal hair 80 %, Cellulose 20 %	117101879-09L3	No	NAD (by CVES) by John S. Shearwood on 10/28/17

Reporting Notes:

Analyzed by: John S. Shearwood *John S. Shearwood* Date: 10/28/2017 Reviewed by: *John S. Shearwood*

*NAD = no asbestos detected. Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # A1009156

Issued: 3/13/2017

Expires: 3/31/2018

William M. Arvey

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

Walter M. Dwyer

Director
WV OEHS

WEST VIRGINIA

Asbestos Program



Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN

**ASBESTOS LABORATORY -
AIR AND BULK**

License # LT000563

Issued: 5/31/2017

Expires: 5/31/2018

Walter M. Drey

Director
WV OEHS

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants

5320 N. Pioneer Road
Gibsonia, PA 15044

Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



Walter M. Ivey, Director
Office of Environmental Health Services

APPENDIX B
CONTRACTOR COST ESTIMATES

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL F
(ELECTRICAL UTILITY MAINTENANCE BUILDING)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

TABLE OF CONTENTS

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FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report
Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel F – Electrical Utility Maintenance Building (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 0.3 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former Electrical Utility Maintenance Building, a 13,000 square foot steel framed bloc and brick structure with concrete foundations and floors. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Electrical Utility Maintenance Building was constructed in the early 1900s as part of the former Weirton Steel facility. The building was historically used to store supplies and perform maintenance on equipment related to the facility iron and steel making operations. The iron and steel making operations of the facility ceased around 2011 and the Maintenance Building has remained vacant since that time.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. Sixty (60) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in 17 samples associated primarily with pipe wrap/insulation and transite. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

DRAFT

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-contaminated debris that will result from the demolition of the ticket booth will be disposed at an off-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$136,000
Third Party Air Sampling.....	\$2,000
Project Management	\$3,000
Total	\$142,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

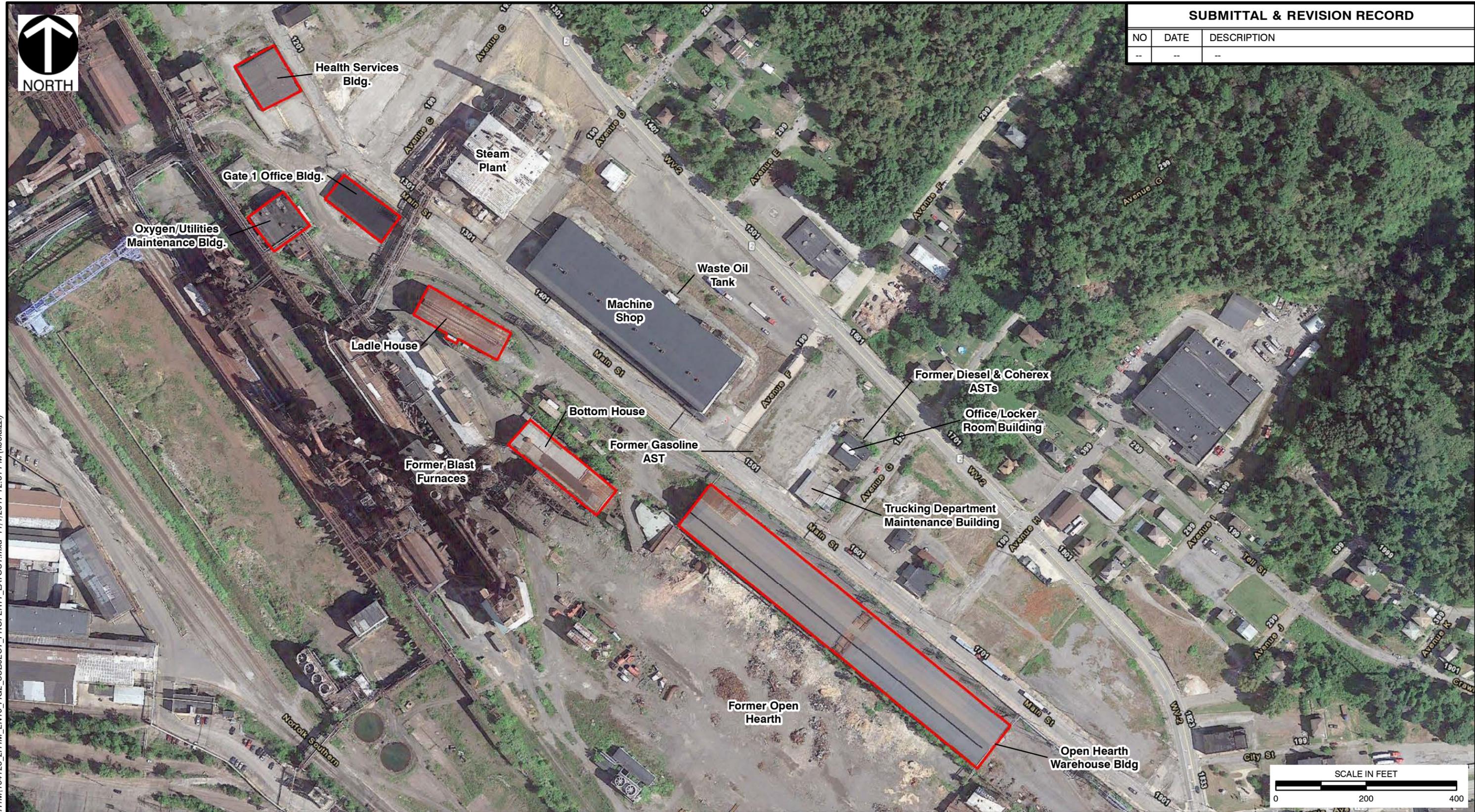
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.


Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M\EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

DRAFT

APPENDIX A

EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
MAINTENANCE BUILDING
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX

midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

November 2, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Maintenance Building

To Whom It May Concern:

On Thursday, October 19th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Former Maintenance Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement and / or demolition activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink that reads "Edgar J. King".

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink that reads "Timothy E. Daniels".

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings - Former Maintenance Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Maintenance Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Maintenance Building was un-occupied and in poor condition. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials (including the rooftop) that may impact planned future demolition of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building and from the rooftops. A total of fifty-four (54) samples, (60) including splits were collected at this time. Of those samples, seventeen (17) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B- for Sample Location Diagrams.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
White Insulation	Maintenance Building 1 st Floor Labeled Asbestos Blue Painted 12" Pipe	200 Ln Ft Visible	Friable	15 % Chrysotile 35% Amosite
Grey Transite	Maintenance Building Basement Electrical Room In Electrical Boxes	100 Sq Ft	Non-Friable	25 % Chrysotile
Orange / Black Tar Paper / Insulation	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	210 Ln Ft Visible	Friable	15 % Chrysotile
Orange / Black Tar Paper / Insulation	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	210 Ln Ft Visible	Friable	15-20 % Chrysotile
Orange / White Insulation	Maintenance Building Basement Orange Painted 8" Not Labeled	80 Ln Ft Visible	Non-Friable	15-25 % Chrysotile 30-35% Amosite

North End Buildings - Former Maintenance Building

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

Refer to appendices for further information.

Appendix A—Building Inspection Results

Appendix B—Sample Location Diagrams

Appendix C—Laboratory Analysis Results

Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— November 2, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Maintenance Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the roofs) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01A	Maintenance Building Trailer Left Rear of Building	Grey 12 x 12 Floor Tile	480 Sq Ft (A)	Poor	High	None
01B	Maintenance Building Trailer Left Rear of Building	Transparent Yellow Floor Tile Adhesive	(A)	Poor	High	None
02A	Maintenance Building Trailer Left Rear of Building	Grey 12 x 12 Floor Tile	(A)	Poor	High	None
02B	Maintenance Building Trailer Left Rear of Building	Transparent Yellow Floor Tile Adhesive	(A)	Poor	High	None
03A	Maintenance Building Trailer Left Rear of Building	Grey 12 x 12 Floor Tile	(A)	Poor	High	None
03B	Maintenance Building Trailer Left Rear of Building	Transparent Yellow Floor Tile Adhesive	(A)	Poor	High	None
04	Maintenance Building Trailer Left Rear of Building	White / Brown Ceiling Panels	480 Sq Ft (B)	Poor	High	None
05	Maintenance Building Trailer Left Rear of Building	White / Brown Ceiling Panels	(B)	Poor	High	None
06	Maintenance Building Trailer Left Rear of Building	White / Brown Ceiling Panels	(B)	Poor	High	None
07	Maintenance Building Trailer Left Rear of Building Windows	Clear Window Caulking	6 Windows @ 12 Ln Ft Each (C)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
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 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
08	Maintenance Building Trailer Left Rear of Building Windows	Clear Window Caulking	(C)	Poor	High	None
09	Maintenance Building Trailer Left Rear of Building Windows	<i>*Insufficient amount material. Not analyzed.</i>	(C)	Poor	High	NA
10A	Maintenance Building Trailer Right Rear of Building	Grey 12 x 12 Floor Tile	480 Sq Ft (D)	Poor	High	None
10B	Maintenance Building Trailer Right Rear of Building	Transparent Yellow Floor Tile Adhesive	(D)	Poor	High	None
11A	Maintenance Building Trailer Right Rear of Building	Grey 12 x 12 Floor Tile	(D)	Poor	High	None
11B	Maintenance Building Trailer Right Rear of Building	Transparent Yellow Floor Tile Adhesive	(D)	Poor	High	None
12A	Maintenance Building Trailer Right Rear of Building	Grey 12 x 12 Floor Tile	(D)	Poor	High	None
12B	Maintenance Building Trailer Right Rear of Building	Transparent Yellow Floor Tile Adhesive	(D)	Poor	High	None
13	Maintenance Building Trailer Right Rear of Building	White / Brown Ceiling Panels	480 Sq Ft (E)	Poor	High	None
14	Maintenance Building Trailer Right Rear of Building	White / Brown Ceiling Panels	(E)	Poor	High	None

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 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
15	Maintenance Building Trailer Right Rear of Building	White / Brown Ceiling Panels	(E)	Poor	High	None
16	Maintenance Building Trailer Right Rear of Building Windows	Clear Window Caulking	6 Windows @ 12 Ln Ft Each (F)	Poor	High	None
17	Maintenance Building Trailer Right Rear of Building Windows	Clear Window Caulking	(F)	Poor	High	None
18	Maintenance Building Trailer Right Rear of Building Windows	Clear Window Caulking	(F)	Poor	High	None
19	Maintenance Building 1 st Floor Labeled Non-Asbestos 6" Pipe	Black / White Tar Paper / Insulation	800 Ln Ft Visible (G)	Poor	High	None
20	Maintenance Building 1 st Floor Labeled Non-Asbestos 6" Pipe	Black / White Tar Paper / Insulation	(G)	Poor	High	None
21	Maintenance Building 1 st Floor Labeled Non-Asbestos 6" Pipe	Black / White Tar Paper / Insulation	(G)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities throughout this survey for that particular material.

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Building Inspection Results

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 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
22	Maintenance Building 1 st Floor Labeled Asbestos Blue Painted 12" Pipe	White Insulation	200 Ln Ft Visible (H)	Poor	High	50 %
23	Maintenance Building 1 st Floor Labeled Asbestos Blue Painted 12" Pipe	White Insulation	(H)	Poor	High	50 %
24	Maintenance Building 1 st Floor Labeled Asbestos Blue Painted 12" Pipe	White Insulation	(H)	Poor	High	50 %
25	Maintenance Building 1 st Floor Break Room	Tan 12 x 12 Floor Tile	200 Sq Ft (I)	Poor	High	None
26	Maintenance Building 1 st Floor Break Room	Tan 12 x 12 Floor Tile	(I)	Poor	High	None
27	Maintenance Building 1 st Floor Break Room	Tan 12 x 12 Floor Tile	(I)	Poor	High	None
28	Maintenance Building Basement Electrical Room In Electrical Boxes	Grey Transite	100 Sq Ft (J)	Poor	High	25 %
29	Maintenance Building Basement Electrical Room In Electrical Boxes	Grey Transite	(J)	Poor	High	25 %
30	Maintenance Building Basement Electrical Room In Electrical Boxes	Grey Transite	(J)	Poor	High	25 %
31	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Black Tar Paper / Insulation	210 Ln Ft Visible (K)	Poor	High	15 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
32	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Black Tar Paper / Insulation	210 Ln Ft Visible (L)	Poor	High	15 %
33	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange Insulation	210 Ln Ft (M)	Poor	High	None
34	Maintenance Building Basement Orange Painted 8" Not Labeled	Orange / White Insulation	80 Ln ft Visible (N)	Poor	High	55 %
35	Maintenance Building Basement Orange Painted 8" Not Labeled	Orange / White Insulation	(N)	Poor	High	55 %
36	Maintenance Building Basement Orange Painted 8" Not Labeled	Orange / White Insulation	(N)	Poor	High	55 %
37	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Yellow Insulation	(K)	Poor	High	25 %
38	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Yellow Insulation	(L)	Poor	High	20 %
39	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Yellow Insulation	(K)	Poor	High	20 %
40	Maintenance Building Basement Orange Painted 4" Labeled Non-Asbestos	Orange / Yellow Insulation	(L)	Poor	High	20 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Building Inspection Results

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 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
41	Maintenance Building Basement Orange Painted 4" Labeled Asbestos	Orange / White Insulation	(M)	Poor	High	55 %
42	Maintenance Building Basement Orange Painted 4" Labeled Asbestos	Orange / White Insulation	(M)	Poor	High	55 %
43	Maintenance Building Basement 4" Not Painted or Labeled	Black / White Insulation	270 Ln Ft Visible (N)	Poor	High	None
44	Maintenance Building Basement 4" Not Painted or Labeled	Black / White Insulation	(N)	Poor	High	None
45	Maintenance Building Basement 4" Not Painted or Labeled	Black / White Insulation	(N)	Poor	High	None
46	Maintenance Building Roof Larger Area	Brown Roofing	5,100 Sq Ft (O)	Poor	High	None
47	Maintenance Building Roof Larger Area	Brown Roofing	(O)	Poor	High	None
48	Maintenance Building Roof Larger Area	Brown Roofing	(O)	Poor	High	None
49	Maintenance Building Roof Smaller Center Area	Black / Yellow Roofing	3,100 Sq Ft (P)	Poor	High	None
50	Maintenance Building Roof Smaller Center Area	Black / Yellow Roofing	(P)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonsia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Maintenance Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
51	Maintenance Building Roof Smaller Center Area	Black / Yellow Roofing	(P)	Poor	High	None
52	Maintenance Building Exterior on Metal Front Wall	Brown / Black Paint	5,100 Sq Ft (Q)	Poor	High	None
53	Maintenance Building Exterior on Metal Front Wall	Brown / Black Paint	(Q)	Poor	High	None
54	Maintenance Building Exterior on Metal Front Wall	Brown / Black Paint	(Q)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-19-17 INSPECTOR: Edgar King

CLIENT: CEC

LOCATION: Mingo Junction steel North End Bldgs (maint shop)

ADDRESS: Weirton W.V.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain _____

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 4

Main exterior building component (i.e. yellow brick, concrete block, etc...) Brick

Please answer yes or no.

Was the basement included? yes Was the attic included? NA

Was the roof included? yes Is a map included? yes

Were any areas inaccessible? NO If yes, explain _____

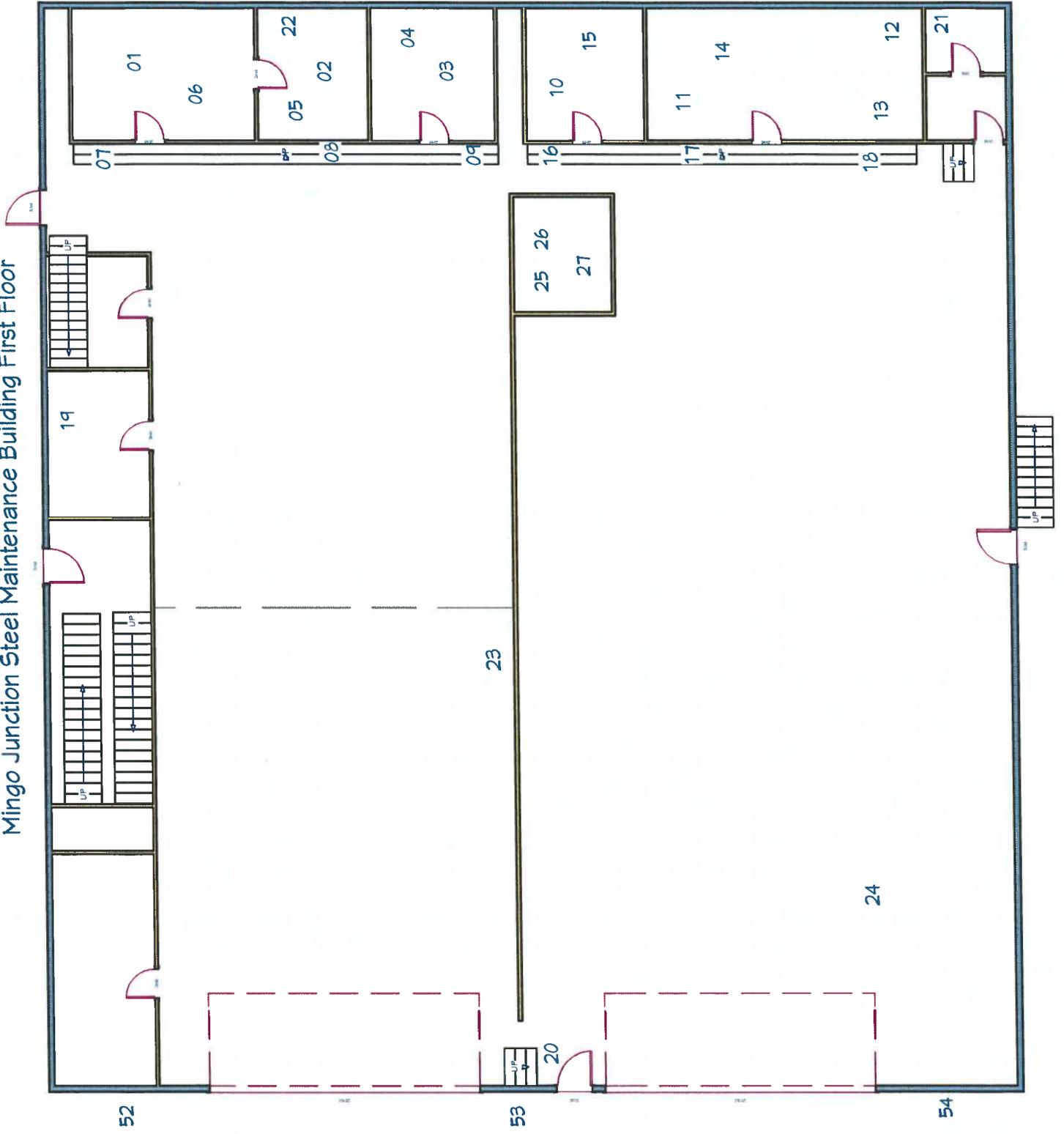
Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO Plaster, Caulking or Glazing.

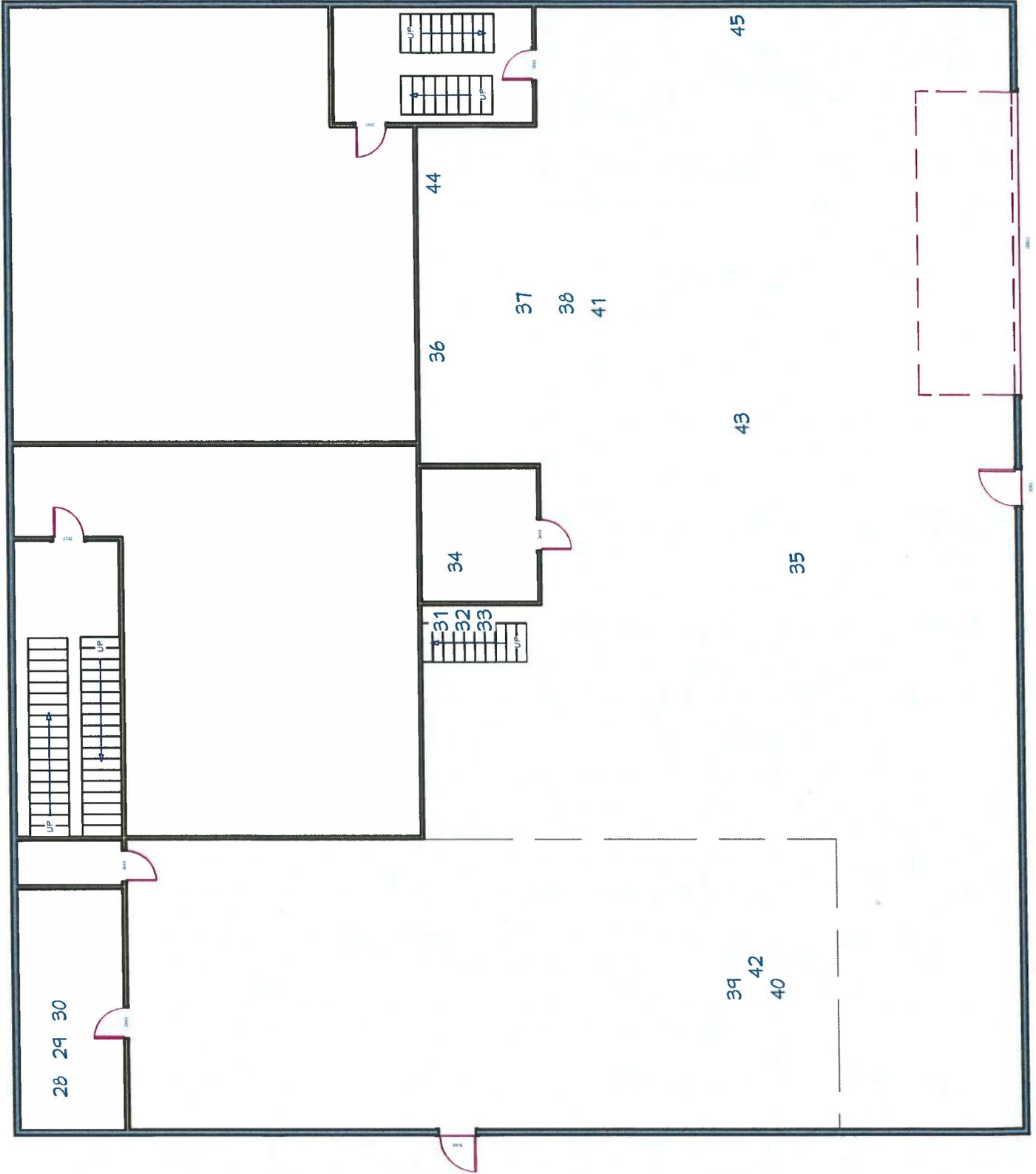
Any other important / relevant observations:

Appendix B – Sample Location Diagrams

Mingo Junction Steel Maintenance Building First Floor



Mingo Junction Steel Maintenance Building Basement



Mingo Junction Steel Maintenance Building Roof

47

48

51

49

50

46

Appendix C – Laboratory Analysis Results



5320 N. Pioneer Road
 Gibsonia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101884

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		PLM Asbestos	Standard
54			

Project Site: Mingo Junction Steel Mill ^{Maint Bldg} Sampler Signature: [Signature] JN# CEC-17-01

Client / Address: CEC Phone: _____ Fax: _____

Relinquished By: Edgar King Date: 10-20-17 Time: 0600

Relinquished By: [Signature] Date: 10/20/17 Time: 8:58 am

Received By (AmeriSci) _____ Date: _____ Time: _____

Additional Information:

- Please indicate Mid Atlantic's job # on all results and invoices
- Email results to midatlantic@zoominternet.net

RECEIVED
 OCT 23 2017
 BY [Signature]



Please Reply To:

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

FACSIMILE TELECOPY TRANSMISSION

To: Tim Daniels
Mid Atlantic Environmental Consultants, Inc
Fax #:
Email: MIDATLANTIC@ZOOMINTERNET.NET

From: J. Samuel Baird
AmeriSci Job #: 117101884
Subject: PLM 5 day Results
Client Project: CEC-17-21; CEC; Mingo Junction
Steel Weirton Maint Bldg

Date: Monday, October 30, 2017
Time: 14:56:35
Comments:

Number of Pages: 17
(including cover sheet)



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AmeriSci Richmond

13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants,
Attn: Tim Daniels
5320 North Pioneer Road
Gibsonia, PA 15044

Date Received 10/23/17 **AmeriSci Job #** 117101884
Date Examined 10/27/17 **P.O. #**
Page 1 **of** 11
RE: CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
01 Location: Maint Bldg Trailer Left Rear Of Bldg Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %	117101884-01L1	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
01 Location: Maint Bldg Trailer Left Rear Of Bldg Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %	117101884-01L2	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
02 Location: Maint Bldg Trailer Left Rear Of Bldg Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %	117101884-02L1	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
02 Location: Maint Bldg Trailer Left Rear Of Bldg Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %	117101884-02L2	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
03 Location: Maint Bldg Trailer Left Rear Of Bldg Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %	117101884-03L1	No	NAD (by CVES) by J. Samuel Baird on 10/27/17

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
03	117101884-03L2 Location: Maint Bldg Trailer Left Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
04	117101884-04 Location: Maint Bldg Trailer Left Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
05	117101884-05 Location: Maint Bldg Trailer Left Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
06	117101884-06 Location: Maint Bldg Trailer Left Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
07	117101884-07 Location: Maint Bldg Trailer Left Rear Of Bldg Window	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Caulk Asbestos Types: Other Material: Non-fibrous 100 %			
08	117101884-08 Location: Maint Bldg Trailer Left Rear Of Bldg Window	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Caulk Asbestos Types: Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
09	117101884-09 Location: Maint Bldg Trailer Left Rear Of Bldg Window		NA
Analyst Description: Insufficient Material Asbestos Types: Other Material:			
10	117101884-10L1 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
10	117101884-10L2 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
11	117101884-11L1 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
11	117101884-11L2 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
12	117101884-12L1 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
12	117101884-12L2 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Transparent Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
13	117101884-13 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
14	117101884-14 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
15	117101884-15 Location: Maint Bldg Trailer Right Rear Of Bldg	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Ceiling Tile Asbestos Types: Other Material: Cellulose 100 %			
16	117101884-16 Location: Maint Bldg Trailer Right Rear Of Bldg Windows	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Caulk Asbestos Types: Other Material: Non-fibrous 100 %			
17	117101884-17 Location: Maint Bldg Trailer Right Rear Of Bldg Windows	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Caulk Asbestos Types: Other Material: Non-fibrous 100 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
18 Location: Maint Bldg Trailer Right Rear Of Bldg Windows	117101884-18	No	NAD (by CVES) by J. Samuel Baird on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Caulk Asbestos Types: Other Material: Non-fibrous 100 %			
19 Location: Maint Bldg 1st FI Labeled Non Asb 6" Pipe	117101884-19	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 75 %, Non-fibrous 25 %			
20 Location: Maint Bldg 1st FI Labeled Non Asb 6" Pipe	117101884-20	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 75 %, Non-fibrous 25 %			
21 Location: Maint Bldg 1st FI Labeled Non Asb 6" Pipe	117101884-21	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 75 %, Non-fibrous 25 %			
22 Location: Maint Bldg 1st FI Labeled Non Asbestos Blue Painted 12" Pipe	117101884-22	Yes	50 % (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 %, Amosite 35.0 % Other Material: Non-fibrous 50 %			
23 Location: Maint Bldg 1st FI Labeled Non Asbestos Blue Painted 12" Pipe	117101884-23	Yes	50 % (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 %, Amosite 35.0 % Other Material: Non-fibrous 50 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
24	117101884-24	Yes	50 %
Location: Maint Bldg 1st FI Labeled Non Asbestos Blue Painted 12" Pipe			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 %, Amosite 35.0 % Other Material: Non-fibrous 50 %			
25	117101884-25	No	NAD
Location: Maint Bldg 1st FI Labeled Break Room			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Tan, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
26	117101884-26	No	NAD
Location: Maint Bldg 1st FI Labeled Break Room			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Tan, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
27	117101884-27	No	NAD
Location: Maint Bldg 1st FI Labeled Break Room			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Tan, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
28	117101884-28	Yes	25 %
Location: Maint Bldg Basement Electrical Room In Elect Boxes			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 % Other Material: Non-fibrous 75 %			
29	117101884-29	Yes	25 %
Location: Maint Bldg Basement Electrical Room In Elect Boxes			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 % Other Material: Non-fibrous 75 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
30	117101884-30	Yes	25 %
Location: Maint Bldg Basement Electrical Room In Elect Boxes			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 % Other Material: Non-fibrous 75 %			
31	117101884-31	Yes	15 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 % Other Material: Cellulose 20 %, Fibrous glass 60 %, Non-fibrous 5 %			
32	117101884-32	Yes	15 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 % Other Material: Cellulose 20 %, Fibrous glass 60 %, Non-fibrous 5 %			
33	117101884-33	No	NAD
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asbestos			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 75 %, Fibrous glass 15 %, Non-fibrous 10 %			
34	117101884-34	Yes	50 %
Location: Maint Bldg Basement Orange Painted 8" Not Labeled			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 %, Amosite 35.0 % Other Material: Non-fibrous 50 %			
35	117101884-35	Yes	55 %
Location: Maint Bldg Basement Orange Painted 8" Not Labeled			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 %, Amosite 30.0 % Other Material: Cellulose 15 %, Non-fibrous 30 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
36	117101884-36	Yes	55 %
Location: Maint Bldg Basement Orange Painted 8" Not Labeled			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 %, Amosite 30.0 % Other Material: Cellulose 15 %, Non-fibrous 30 %			
37	117101884-37	Yes	25 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Yellow, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 % Other Material: Cellulose 15 %, Fibrous glass 55 %, Non-fibrous 5 %			
38	117101884-38	Yes	20 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Yellow, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 25 %, Fibrous glass 45 %, Non-fibrous 10 %			
39	117101884-39	Yes	20 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Yellow, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 35 %, Fibrous glass 35 %, Non-fibrous 10 %			
40	117101884-40	Yes	20 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Non Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/Yellow, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 35 %, Fibrous glass 35 %, Non-fibrous 10 %			
41	117101884-41	Yes	55 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 %, Amosite 30.0 % Other Material: Cellulose 20 %, Non-fibrous 25 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
42	117101884-42	Yes	55 %
Location: Maint Bldg Basement Orange Painted 4" Labeled Asb			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Orange/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 25.0 %, Amosite 30.0 % Other Material: Cellulose 20 %, Non-fibrous 25 %			
43	117101884-43	No	NAD
Location: Maint Bldg Basement Not Painted On Labeled 4"			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 10 %, Non-fibrous 35 %			
44	117101884-44	No	NAD
Location: Maint Bldg Basement Not Painted On Labeled 4"			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 10 %, Non-fibrous 35 %			
45	117101884-45	No	NAD
Location: Maint Bldg Basement Not Painted On Labeled 4"			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 10 %, Non-fibrous 35 %			
46	117101884-46	No	NAD
Location: Maint Bldg Roof Longer Area			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 95 %, Non-fibrous 5 %			
47	117101884-47	No	NAD
Location: Maint Bldg Roof Longer Area			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 95 %, Non-fibrous 5 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
48 Location: Maint Bldg Roof Longer Area	117101884-48	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 95 %, Non-fibrous 5 %			
49 Location: Maint Bldg Roof Smaller Center Area	117101884-49	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/Yellow, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 35 %, Fibrous glass 15 %, Synthetic fibers 20 %, Non-fibrous 30 %			
50 Location: Maint Bldg Roof Smaller Center Area	117101884-50	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/Yellow, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 35 %, Fibrous glass 15 %, Non-fibrous 50 %			
51 Location: Maint Bldg Roof Smaller Center Area	117101884-51	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Black/Yellow, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 35 %, Fibrous glass 20 %, Non-fibrous 45 %			
52 Location: Maint Bldg Exterior On Metal Front Wall	117101884-52	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown/Black, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
53 Location: Maint Bldg Exterior On Metal Front Wall	117101884-53	No	NAD (by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown/Black, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Maint Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
54	117101884-54	No	NAD
Location: Maint Bldg Exterior On Metal Front Wall			(by CVES) by J. Samuel Baird on 10/30/17
Analyst Description: Brown/Black, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

Reporting Notes:

Analyzed by: J. Samuel Baird  Date: 10/27/2017 Reviewed by: 

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # A1009156

Issued: 3/13/2017

Expires: 3/31/2018

William M. Avey

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

Walter M. Dray

Director
WV OEHS

WEST VIRGINIA

Asbestos Program



Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN

**ASBESTOS LABORATORY -
AIR AND BULK**

License # LT000563

Issued: 5/31/2017

Expires: 5/31/2018

William M. Argy

Director
WV OEHS

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants

5320 N. Pioneer Road
Gibsonia, PA 15044

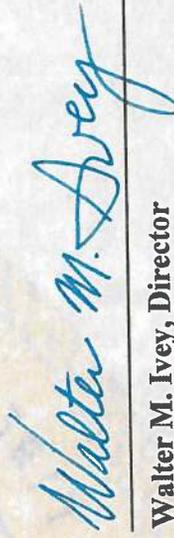
Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



Walter M. Ivey, Director
Office of Environmental Health Services

DRAFT

APPENDIX B

CONTRACTOR COST ESTIMATES

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL E
(GATE 1 OFFICE BUILDING)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

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FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report

Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel E – Gate 1 Office Building (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 0.23 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former Gate 1 Office Building, a 10,000 square foot single-story steel and block structure with a finished interior. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Office Building was constructed in the mid-1900s as part of the former Weirton Steel facility. The building was historically used as administrative offices for the iron and steel-making operations at the facility. Iron and steel making operations ceased around 2011 and the building has been vacant since that time.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. Sixty four (64) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in 31 samples associated primarily with floor tile/mastic, pipe wrap/insulation and pipe joint mud. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

DRAFT

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$45,000
Third Party Air Sampling.....	\$1,000
Project Management	\$2,000
Total	\$49,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

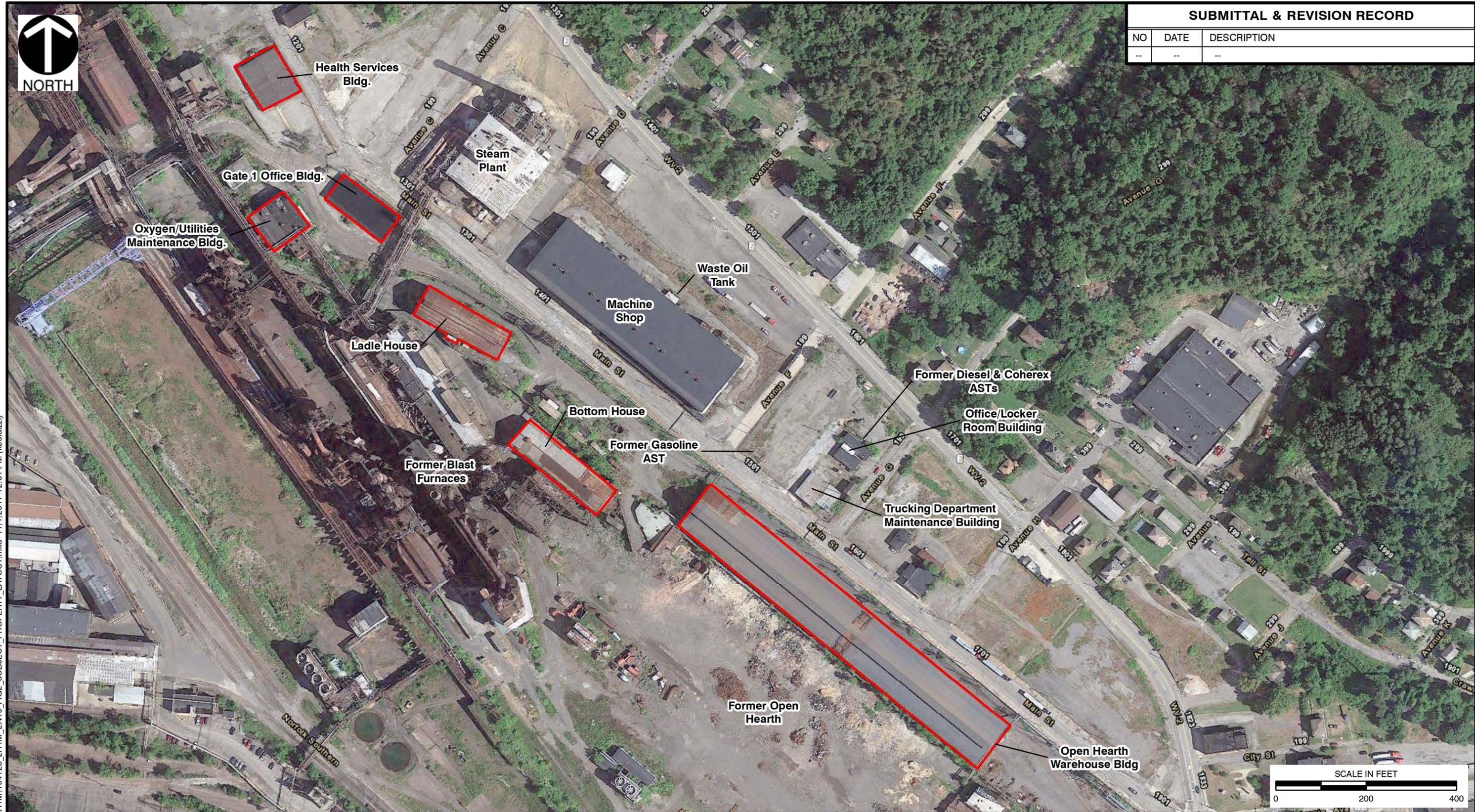
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.


Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M\EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

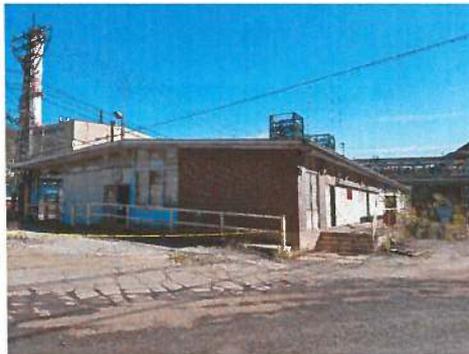
DRAFT

APPENDIX A

EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
OFFICE BUILDING
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX
midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

October 31, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Office Building

To Whom It May Concern:

On Wednesday, October 18th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Office Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Edgar J. King'.

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink, appearing to read 'Timothy E. Daniels'.

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings – Former Office Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Office Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Office Building was un-occupied and in poor condition. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials (including the rooftop) that may impact planned future demolition of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building and from the rooftops. A total of fifty-one (51) samples, (64) including splits were collected at this time. Of those samples, thirty-one (31) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B for Sample Location Diagrams.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
Grey 12 x 12 Floor Tile	Office Building Throughout	4,100 Sq Ft	Non-Friable	2-3 % Chrysotile
Black Floor Tile Mastic	Office Building Throughout	4,100 Sq Ft	Non-Friable	5 % Chrysotile
Black Tar Paper	Office Building Throughout 4" Water Lines Above Ceiling	270 Ln Ft (Visible)	Non-Friable	20 % Chrysotile
Grey Mag. Insulation	Office Building Throughout 4" Water Lines Above Ceiling	270 Ln Ft Visible	Friable	8 % Chrysotile 12% Amosite
Black Tar Paper	Office Building Throughout 4" Water Lines Above Ceiling	390 Ln Ft Visible	Non-Friable	20 % Chrysotile
Grey Mag. Insulation	Office Building Throughout 4" Water Lines Above Ceiling	390 Ln Ft Visible	Friable	8 % Chrysotile 12% Amosite
Grey Fitting Mud	Office Building Throughout 4" Water Lines Above Ceiling	30 Fittings Visible	Friable	5-20 % Chrysotile

North End Buildings – Former Office Building

TABLE 1—ASBESTOS CONTAINING MATERIALS (*Continued*)

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE/ NON-FRIABLE	ASBESTOS CONTENT
Grey Fitting Mud	Office Building Throughout 4" Water Lines Above Ceiling	15 Fittings Visible	Friable	5-20% Chrysotile
White / Grey Tape Wrap	Office Building Behind Drywall Outside Faucets	30 Ln Ft Visible	Non-Friable	65% Chrysotile
Black / Silver Coating on Metal	Roof	8,900 Sq Ft	Non-Friable	2% Chrysotile

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

Refer to appendices for further information.

- Appendix A—Building Inspection Results
- Appendix B—Sample Location Diagrams
- Appendix C—Laboratory Analysis Results
- Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— October 31, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Office Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the roofs) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 18, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Office Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01	Office Building Throughout	Yellow / White 2 x 4 Ceiling Tile	7,350 Sq Ft (A)	Poor	High	None
02	Office Building Throughout Above Ceiling Tile	Yellow / Green Fiberglass Insulation	8,900 Sq Ft (B)	Poor	High	None
03A	Office Building Throughout	Grey 12 x 12 Floor Tile	4,100 Sq Ft (C)	Poor	High	2 %
03B	Office Building Throughout	Black Floor Tile Mastic	(C)	Poor	High	5 %
04A	Office Building Throughout	Grey 4" Cove Base	1,850 Ln Ft (D)	Poor	High	None
04B	Office Building Throughout	Tan Cove Base Adhesive	(D)	Poor	High	None
05	Office Building Throughout	Grey / Brown Drywall	25,900 Sq Ft (E)	Poor	High	None
06	Office Building Throughout	Off White Joint Compound	Unknown	Poor	High	Trace
07	Office Building Throughout	Yellow / White 2 x 4 Ceiling Tile	(A)	Poor	High	None
08	Office Building Throughout	Yellow / Green Fiberglass Insulation	(B)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Client: Civil & Environmental Consultants, Inc.
 Project: Mingo Junction Steel Works – North End Buildings
 Office Building – Weirton, West Virginia
 Job Number: CEC-17-21

Date: October 18, 2017
 Inspector: Edgar King
 EPA / West Virginia Lic. No: AI009156

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
09A	Office Building Throughout Some Under Carpet	Grey 12 x 12 Floor Tile	(C)	Poor	High	3 %
09B	Office Building Throughout Some Under Carpet	Black Floor Tile Mastic	(C)	Poor	High	5 %
10A	Office Building Throughout	Black 4" Cove Base	(D)	Poor	High	None
10B	Office Building Throughout	Brown Cove Base Adhesive	(D)	Poor	High	None
11	Office Building Throughout	Grey / Brown Drywall	(E)	Poor	High	None
12	Office Building Throughout	Off White Joint Compound	Unknown	Poor	High	Trace
13A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	270 Ln Ft Visible (F)	Poor	High	20 %
13B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(F)	Poor	High	20 %
14A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	390 Ln Ft Visible (G)	Poor	High	20 %
14B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(G)	Poor	High	20 %

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 18, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Office Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
15	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	30 Fittings Visible (H)	Poor	High	5%
16	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	15 Fittings Visible (I)	Poor	High	5%
17	Office Building Security Office Above Ceilings	Yellow / White / Silver TSI Fiberglass	30 Ln Ft (J)	Poor	High	None
18	Office Building Security Office Above Ceilings	Yellow / White / Silver TSI Fiberglass	(J)	Poor	High	None
19	Office Building Security Office Above Ceilings	Yellow / White / Silver TSI Fiberglass	(J)	Poor	High	None
20	Office Building Throughout	Brown / White 2 x 4 Ceiling Tile	(A)	Poor	High	None
21	Office Building Throughout Above Ceiling Tile	Brown / Green Fiberglass Insulation	(B)	Poor	High	None
22A	Office Building Throughout Some Under Carpet	Grey 12 x 12 Floor Tile	(C)	Poor	High	2%
22B	Office Building Throughout Some Under Carpet	Black Floor Tile Mastic	(C)	Poor	High	5%

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc.
 Project: Mingo Junction Steel Works – North End Buildings
 Office Building – Weirton, West Virginia
 Job Number: CEC-17-21

Date: October 18, 2017
 Inspector: Edgar King
 EPA / West Virginia Lic. No: AI009156

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
23A	Office Building Throughout	Black 4" Cove Base	(D)	Poor	High	None
23B	Office Building Throughout	Brown Cove Base Adhesive	(D)	Poor	High	None
24	Office Building Throughout	Grey / Brown Drywall	(E)	Poor	High	None
25	Office Building Throughout	Off White Joint Compound	Unknown	Poor	High	Trace
26A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	(F)	Poor	High	20 %
26B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(F)	Poor	High	20 %
27A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	(G)	Poor	High	20 %
27B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(G)	Poor	High	20 %
28	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	(H)	Poor	High	15 %
29	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	(H)	Poor	High	15 %

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 18, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Office Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
30A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	(F)	Poor	High	20 %
30B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(F)	Poor	High	20 %
31A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	(G)	Poor	High	20 %
31B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Mag. Insulation	(G)	Poor	High	20 %
32A	Office Building Throughout 4" Water Lines Above Ceiling	Black Tar Paper	(H)	Poor	High	20 %
32B	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	(H)	Poor	High	20 %
33	Office Building Throughout 4" Water Lines Above Ceiling	Grey Fitting Mud	(I)	Poor	High	15 %
34	Office Building Behind Drywall Outside Faucets	White / Grey Tape Wrap	30 Ln Ft Visible (K)	Poor	High	65 %
35	Office Building Behind Drywall Outside Faucets	Grey / White Tape Wrap	(K)	Poor	High	65 %
36	Office Building Behind Drywall Outside Faucets	Grey / White Tape Wrap	(K)	Poor	High	65 %
37	Office Building Chiller Mechanical Room – Metal Wrapped	Yellow / White / Silver TSI Fiberglass	80 Ln Ft (L)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 18, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Office Building – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
38	Office Building Chiller Mechanical Room – Metal Wrapped	Yellow / White / Silver TSI Fiberglass	(L)	Poor	High	None
39	Office Building Chiller Mechanical Room – Metal Wrapped	Yellow / White / Silver TSI Fiberglass	(L)	Poor	High	None
40	Office Building Chiller Mechanical Room – Metal Wrapped	White / Grey Fitting	13 Fittings Visible (M)	Poor	High	None
41	Office Building Chiller Mechanical Room – Metal Wrapped	White / Grey Fitting	(M)	Poor	High	None
42	Office Building Chiller Mechanical Room – Metal Wrapped	White / Grey Fitting	(M)	Poor	High	None
43	Office Building Outside to Chiller Unit – Metal Covered	Yellow / Beige / Silver TSI Fiberglass	80 Ln Ft (N)	Poor	High	None
44	Office Building Outside to Chiller Unit – Metal Covered	Yellow / White / Silver TSI Fiberglass	(N)	Poor	High	None
45	Office Building Outside to Chiller Unit – Metal Covered	Yellow / Beige / Silver TSI Fiberglass	(N)	Poor	High	None
46	Roof	Black / Silver Coating on Metal	8,900 Sq Ft (O)	Poor	High	2 %
47	Roof	Black / Silver Coating on Metal	(O)	Poor	High	2 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
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Building Inspection Results

Client: Civil & Environmental Consultants, Inc.
 Project: Mingo Junction Steel Works – North End Buildings
 Office Building – Weirton, West Virginia
 Job Number: CEC-17-21

Date: October 18, 2017
 Inspector: Edgar King
 EPA / West Virginia Lic. No: AI009156

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
48	Roof	Black / Silver Coating on Metal	(O)	Poor	High	2 %
49	Exterior Windows	Clear Window Caulking	20 Windows @ 28 Ln Ft Each (P)	Poor	High	None
50	Exterior Windows	Clear Window Caulking	(P)	Poor	High	None
51	Exterior Windows	Clear Window Caulking	(P)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-18-17 INSPECTOR: Edgar King

CLIENT: CEC

LOCATION: Mingo Junction steel north end Bldgs (office Bldg)

ADDRESS: Weirton W.V.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain _____

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1

Main exterior building component (i.e. yellow brick, concrete block, etc...) metal

Please answer yes or no.

Was the basement included? NA Was the attic included? NA

Was the roof included? yes Is a map included? yes

Were any areas inaccessible? NO If yes, explain _____

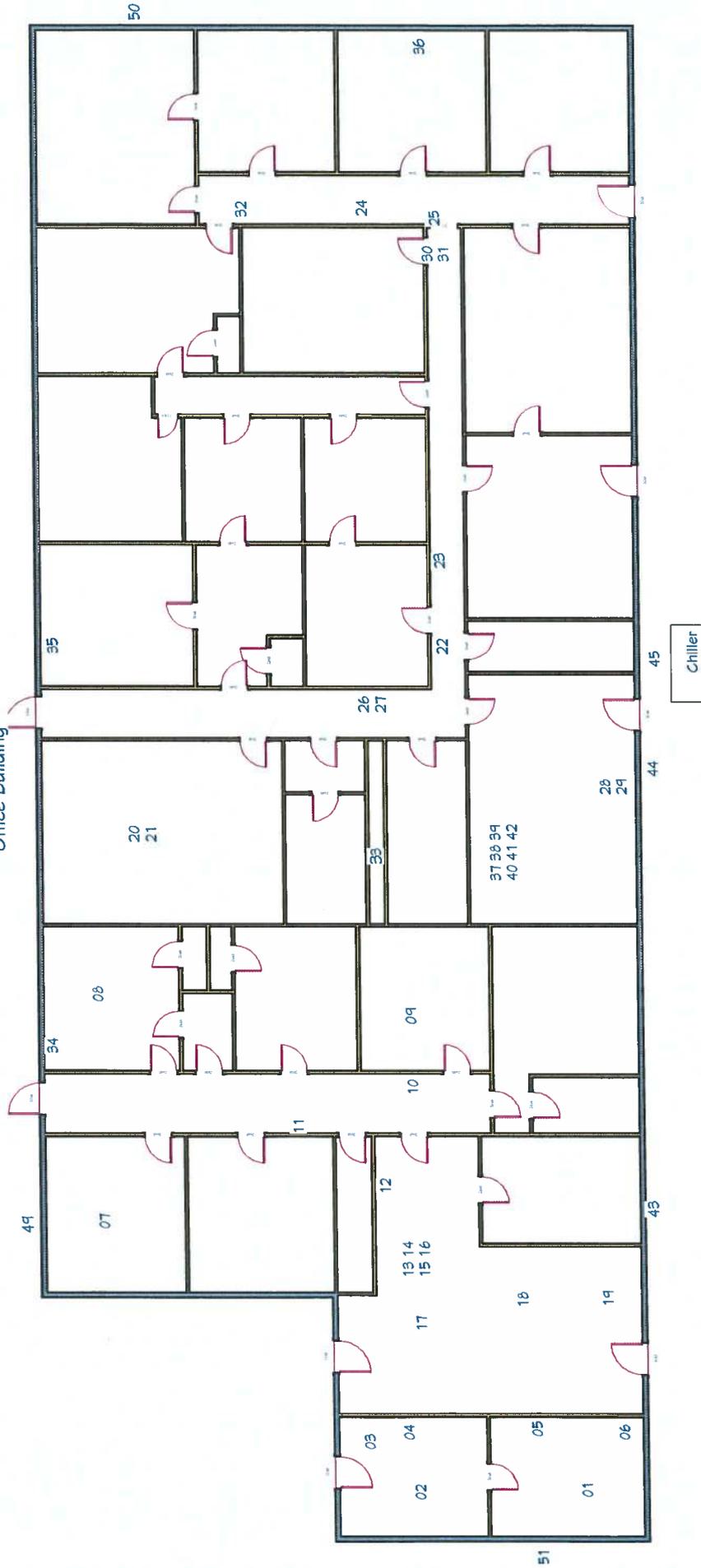
Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO Plaster

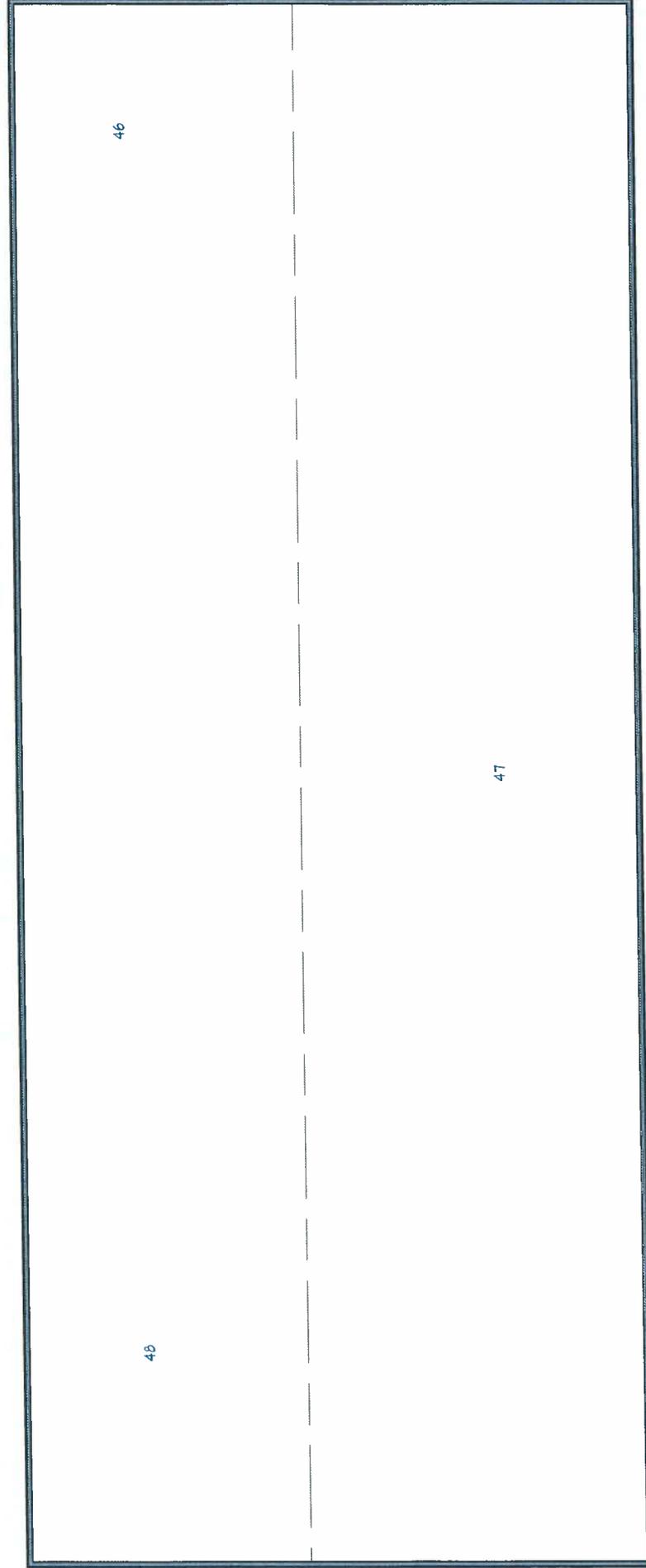
Any other important / relevant observations:

Appendix B – Sample Location Diagrams

Mingo Junction Steel
Office Building



Mingo Junction Steel Office Building Roof



Appendix C – Laboratory Analysis Results



5320 N. Pioneer Road
 Gibsonia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101886

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		PLM Asbestos	standalone
51			

Project Site: Mingo Junction steel mill - office Bldg Sampler Signature: [Signature] JN# CEC-17-21

Client / Address: CEC Phone: _____ Fax: _____

Relinquished By: Edgar King Date: 10-20-17 Time: 0600

Relinquished By: Ashley Burch Date: 10/20/17 Time: 807am

Received By (AmeriSci) _____ Date: _____ Time: _____

Additional Information:

- Please indicate Mid Atlantic's job # on all results and invoices
- Email results to midatlantic@zoominternet.net

RECEIVED
 OCT 23 2017
 By [Signature]



Please Reply To:

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

FACSIMILE TELECOPY TRANSMISSION

To: Tim Daniels
Mid Atlantic Environmental Consultants, Inc
Fax #:
Email: MIDATLANTIC@ZOOMINTERNET.NET

From: John S. Shearwood
AmeriSci Job #: 117101886
Subject: PLM 5 day Results
Client Project: CEC-17-21; CEC; Mingo Junction
Steel Weirton Office Bldg

Date: Friday, October 27, 2017
Time: 18:19:50

Number of Pages: 17
(including cover sheet)

Comments:



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AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants,
Attn: Tim Daniels
5320 North Pioneer Road
Gibsonia, PA 15044

Date Received 10/23/17 **AmeriSci Job #** 117101886
Date Examined 10/27/17 **P.O. #**
Page 1 of 12
RE: CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
01 Location: Office Bldg Thru-Out	117101886-01	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 94 %, Non-fibrous 6 %			
02 Location: Office Bldg Thru-Out Above CT	117101886-02	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/Green, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
03 Location: Office Bldg Thru	117101886-03L1	Yes	2 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Homogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			
03 Location: Office Bldg Thru	117101886-03L2	Yes	5 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Chrysotile 5.0 % Other Material: Non-fibrous 95 %			
04 Location: Office Bldg Thru-Out	117101886-04L1	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Homogeneous, Non-Fibrous, Cove Base Asbestos Types: Other Material: Non-fibrous 100 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
04 Location: Office Bldg Thru-Out	117101886-04L2	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Tan, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Cellulose Trace, Non-fibrous 100 %			
05 Location: Office Bldg Thru-Out	117101886-05	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray/Brown, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %			
06 Location: Office Bldg Thru-Out	117101886-06	Yes	Trace (<1 %) (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Off White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile <1. % Other Material: Non-fibrous 100 %			
07 Location: Office Bldg Thru-Out	117101886-07	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 94 %, Non-fibrous 6 %			
08 Location: Office Bldg Thru-Out	117101886-08	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/Green, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
09 Location: Office Bldg Thru-Out Some Under Carpet	117101886-09L1	Yes	3 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Homogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 3.0 % Other Material: Non-fibrous 97 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
09	117101886-09L2	Yes	5 %
Location: Office Bldg Thru-Out Some Under Carpet			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			
10	117101886-10L1	No	NAD
Location: Office Bldg Thru-Out			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
10	117101886-10L2	No	NAD
Location: Office Bldg Thru-Out			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11	117101886-11	No	NAD
Location: Office Bldg Thru-Out			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray/Brown, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			
12	117101886-12	Yes	Trace (<1 %)
Location: Office Bldg Thru-Out			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Off White, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
13	117101886-13L1	Yes	20 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 20.0 %			
Other Material: Cellulose 40 %, Non-fibrous 40 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
13	117101886-13L2	Yes	20 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 % Other Material: Non-fibrous 80 %			
14	117101886-14L1	Yes	20 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 40 %, Non-fibrous 40 %			
14	117101886-14L2	Yes	20 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 % Other Material: Non-fibrous 80 %			
15	117101886-15	Yes	5 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Chrysotile 5.0 % Other Material: Fibrous glass 65 %, Non-fibrous 30 %			
16	117101886-16	Yes	5 %
Location: Office Bldg Thru-Out Water Lines Above Ceiling 4"			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Chrysotile 5.0 % Other Material: Fibrous glass 65 %, Non-fibrous 30 %			
17	117101886-17	No	NAD
Location: Office Bldg Security Office Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
18 Location: Office Bldg Security Office Above Ceiling	117101886-18	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
19 Location: Office Bldg Security Office Above Ceiling	117101886-19	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
20 Location: Office Bldg Thru-Out	117101886-20	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Brown/White, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Fibrous glass 90 %, Non-fibrous 10 %			
21 Location: Office Bldg Thru-Out Above Tile	117101886-21	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Brown/Green, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Fibrous glass 92 %, Non-fibrous 8 %			
22 Location: Office Bldg Thru-Out Some Under Carpet	117101886-22L1	Yes	2 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
22 Location: Office Bldg Thru-Out Some Under Carpet	117101886-22L2	Yes	5 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
23 Location: Office Bldg Thru-Out	117101886-23L1	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
23 Location: Office Bldg Thru-Out	117101886-23L2	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
24 Location: Office Bldg Thru-Out	117101886-24	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray/Brown, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			
25 Location: Office Bldg Thru-Out	117101886-25	Yes	Trace (<1 %) (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Off White, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
26 Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling	117101886-26L1	Yes	20 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 20.0 %			
Other Material: Cellulose 40 %, Non-fibrous 40 %			
26 Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling	117101886-26L2	Yes	20 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 %			
Other Material: Non-fibrous 80 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
27	117101886-27L1	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 20.0 %			
Other Material: Cellulose 40 %, Non-fibrous 40 %			
27	117101886-27L2	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 %			
Other Material: Non-fibrous 80 %			
28	117101886-28	Yes	15 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Chrysotile 15.0 %			
Other Material: Fibrous glass 15 %, Non-fibrous 70 %			
29	117101886-29	Yes	15 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 15.0 %			
Other Material: Fibrous glass 15 %, Non-fibrous 70 %			
30	117101886-30L1	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper			
Asbestos Types: Chrysotile 20.0 %			
Other Material: Cellulose 40 %, Non-fibrous 40 %			
30	117101886-30L2	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 %			
Other Material: Non-fibrous 80 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
31	117101886-31L1	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 40 %, Non-fibrous 40 %			
31	117101886-31L2	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 % Other Material: Non-fibrous 80 %			
32	117101886-32L1	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Paper Asbestos Types: Chrysotile 20.0 % Other Material: Cellulose 40 %, Non-fibrous 40 %			
32	117101886-32L2	Yes	20 %
Location: Office Bldg Thru-Out 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Fibrous, Insulation Asbestos Types: Chrysotile 8.0 %, Amosite 12.0 % Other Material: Non-fibrous 80 %			
33	117101886-33	Yes	15 %
Location: Office Bldg 4" Water Lines Above Ceiling			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 15.0 % Other Material: Fibrous glass 15 %, Non-fibrous 70 %			
34	117101886-34	Yes	65 %
Location: Office Bldg 4" Behind Drywall Outside Faucets			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: White/Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Chrysotile 65.0 % Other Material: Synthetic fibers 30 %, Non-fibrous 5 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
35	117101886-35	Yes	65 %
Location: Office Bldg 4" Behind Drywall Outside Faucets			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray/White, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 65.0 %			
Other Material: Synthetic fibers 30 %, Non-fibrous 5 %			
36	117101886-36	Yes	65 %
Location: Office Bldg 4" Behind Drywall Outside Faucets			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Gray/White, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 65.0 %			
Other Material: Synthetic fibers 30 %, Non-fibrous 5 %			
37	117101886-37	No	NAD
Location: Office Bldg Chiller Mech Rm Metal Wrapped			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
38	117101886-38	No	NAD
Location: Office Bldg Chiller Mech Rm Metal Wrapped			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
39	117101886-39	No	NAD
Location: Office Bldg Chiller Mech Rm Metal Wrapped			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
40	117101886-40	No	NAD
Location: Office Bldg Chiller Mech Rm Metal Wrapped			(by CVES) by John S. Shearwood on 10/27/17
Analyst Description: White/Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
41 Location: Office Bldg Chiller Mech Rm Metal Wrapped	117101886-41	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: White/Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			
42 Location: Office Bldg Chiller Mech Rm Metal Wrapped	117101886-42	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: White/Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			
43 Location: Office Bldg Outside To Chiller Unit Metal Covered	117101886-43	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/Beige/Silver, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
44 Location: Office Bldg Outside To Chiller Unit Metal Covered	117101886-44	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/White/Silver, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
45 Location: Office Bldg Outside To Chiller Unit Metal Covered	117101886-45	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Yellow/Beige/Silver, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 5 %, Fibrous glass 90 %, Non-fibrous 5 %			
46 Location: Roof	117101886-46	Yes	2 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black/Silver, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
47 Location: Roof	117101886-47	Yes	2 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black/Silver, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			
48 Location: Roof	117101886-48	Yes	2 % (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Black/Silver, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			
49 Location: Exterior Windows	117101886-49	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
50 Location: Exterior Windows	117101886-50	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
51 Location: Exterior Windows	117101886-51	No	NAD (by CVES) by John S. Shearwood on 10/27/17
Analyst Description: Clear, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

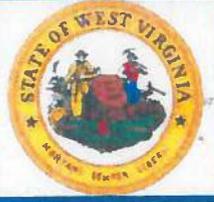
CEC-17-21; CEC; Mingo Junction Steel Weirton Office Bldg

Reporting Notes:

Analyzed by: John S. Shearwood John S. Shearwood Date: 10/27/2017 Reviewed by: John S. Shearwood

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # AI009156
Issued: 3/13/2017
Expires: 3/31/2018

Walter M. Dray

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

Walter M. Dwyer

Director
WV OEHS

WEST VIRGINIA

Asbestos Program

Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN
ASBESTOS LABORATORY -
AIR AND BULK



License # LT000563

Issued: 5/31/2017

Expires: 5/31/2018

Director
WV OEHS

A handwritten signature in black ink, appearing to read "William M. Dray".

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants

5320 N. Pioneer Road
Gibsonia, PA 15044

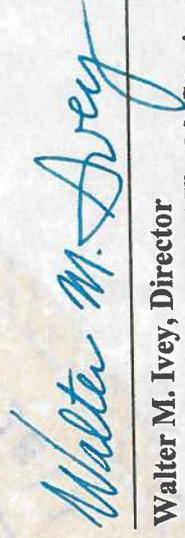
Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



Walter M. Ivey, Director
Office of Environmental Health Services

DRAFT

APPENDIX B

CONTRACTOR COST ESTIMATES

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL D
(MEDICAL SERVICES BUILDING)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

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2.0 Applicable Regulations and Cleanup Standards	2
3.0 Evaluation of Cleanup Alternatives	3
3.1 Cleanup Alternatives and Estimated Costs	3
3.2 Recommended Cleanup Alternative	3
3.3 Consideration of Changing Climate.....	3

FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report
Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel D – Medical Services Building (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 0.23 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former medical Services Building, a 10,000 square foot single-story steel and block structure with a finished interior. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Medical Services Building was constructed in the mid-1900s as part of the former Weirton Steel facility. The building was historically used as a medical treatment center for employees of the steel-making facility (14,000 employees in its heyday). Steel making operations ceased around 2011 and the building has been vacant since that time.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. One hundred six (106) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in 15 samples associated primarily with floor tile/mastic, joint compound, and insulation. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-contaminated debris that will result from the demolition of the ticket booth will be disposed at an off-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$35,000
Third Party Air Sampling.....	\$1,000
Project Management	\$2,000
Total	\$39,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

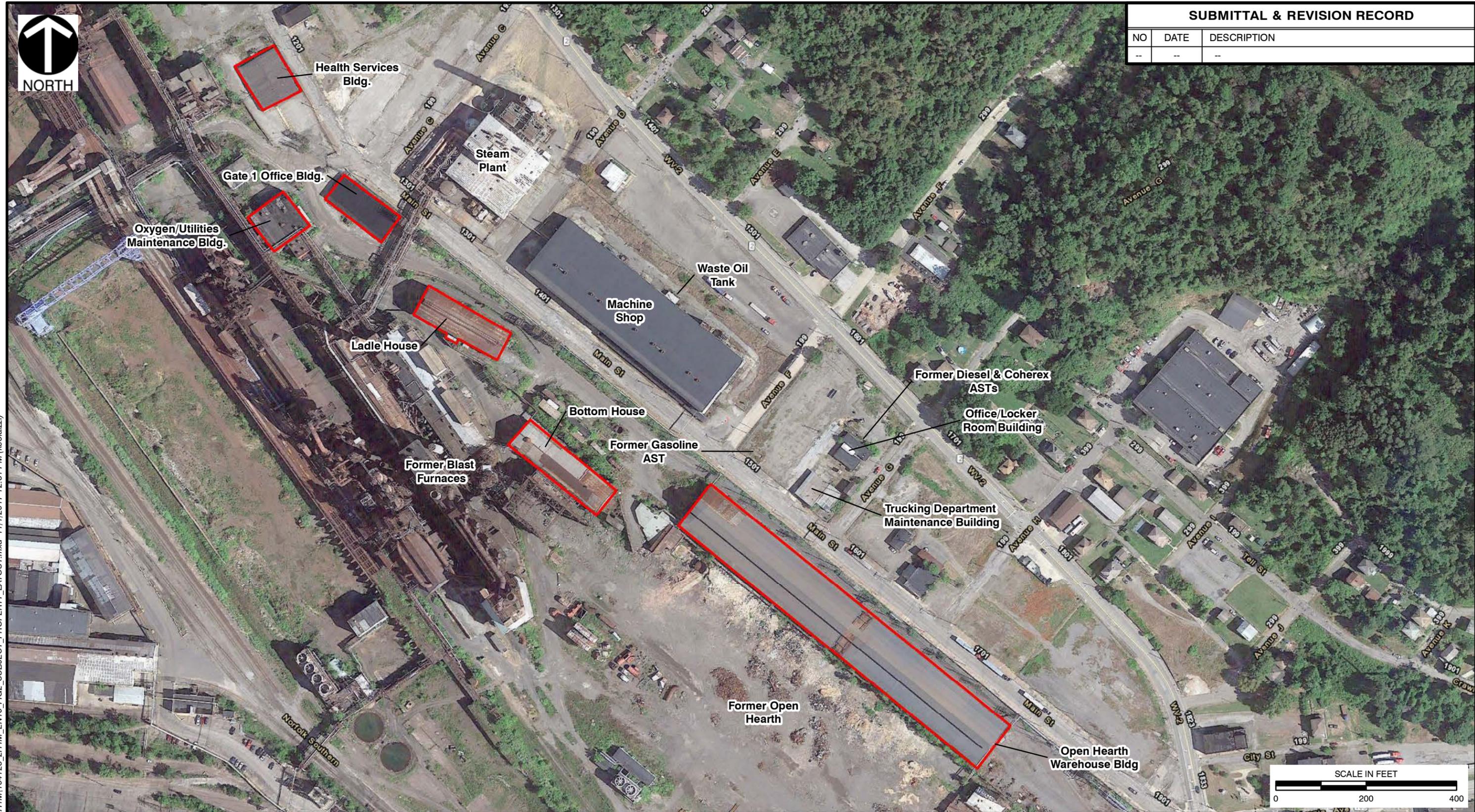
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.


Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M\EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

APPENDIX A
EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
MEDICAL CENTER
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX

midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

November 2, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Medical Center Building

To Whom It May Concern:

On Friday, October 20th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Former Medical Center Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement and / or demolition activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Edgar J. King'.

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink, appearing to read 'Tim Daniels'.

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings - Former Medical Center Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Medical Center Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Medical Center Building was un-occupied and in poor condition. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials (including the rooftop) that may impact planned future demolition of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building and from the rooftops. A total of sixty-six (66) samples, (106) including splits were collected at this time. Of those samples, fifteen (15) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B- for Sample Location Diagrams.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
Off White / Light Beige 9 x 9 Floor Tile	Medical Center Hallways & Rooms Throughout – Some Under Carpet	6,750 Sq Ft	Non-Friable	3 % Chrysotile
Black Floor Tile Mastic	Medical Center Hallways & Rooms Throughout – Some Under Carpet	6,750 Sq Ft	Non-Friable	5 % Chrysotile
Light Beige Joint Compound	Medical Center Walls – Various Areas	Unknown	Friable	2 % Chrysotile
White TSI Mag.	Medical Center Room at End of Treatment Area – 8" Line	12 Ln Ft Visible	Friable	15% Amosite
White TSI Mag.	Medical Center Room at End of Treatment Area – 4" Line	8 Ln Ft Visible	Friable	15% Amosite

North End Buildings - Former Medical Center Building

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

Refer to appendices for further information.

Appendix A—Building Inspection Results

Appendix B—Sample Location Diagrams

Appendix C—Laboratory Analysis Results

Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— November 2, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Medical Center Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the roofs) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AJ009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01	Medical Center Lobby & Physical Therapy Area	White / Light Grey 1 x 1 Ceiling Tile	800 Sq Ft (A)	Poor	High	None
02	Medical Center Lobby & Physical Therapy Area	White / Light Grey 1 x 1 Ceiling Tile	(A)	Poor	High	None
03	Medical Center Lobby & Physical Therapy Area	White / Light Grey 1 x 1 Ceiling Tile	(A)	Poor	High	None
04	Medical Center Hallways & Rooms Throughout	White / Brown 2 x 2 Ceiling Tile	9,000 Sq Ft (B)	Poor	High	None
05	Medical Center Hallways & Rooms Throughout	White / Brown 2 x 2 Ceiling Tile	(B)	Poor	High	None
06	Medical Center Hallways & Rooms Throughout	White / Brown 2 x 2 Ceiling Tile	(B)	Poor	High	None
07A	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Off White / Light Beige 9 x 9 Floor Tile	6,750 Sq Ft (C)	Poor	High	3 %
07B	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Black Floor Tile Mastic	(C)	Poor	High	5 %
08A	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Yellow / Brown Carpet Adhesive	(C)	Poor	High	None
08B	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Off White / Light Beige 9 x 9 Floor Tile	(C)	Poor	High	3 %
08C	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Black Floor Tile Mastic	(C)	Poor	High	5 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
09A	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Off White / Light Beige 9 x 9 Floor Tile	(C)	Poor	High	3 %
09B	Medical Center Hallways & Rooms Throughout – Some Under Carpet	Black Floor Tile Mastic	(C)	Poor	High	5 %
10A	Medical Center Treatment Rooms	White Skim Coat Ceiling Plaster	950 Sq Ft (D)	Poor	High	None
10B	Medical Center Treatment Rooms	Light Grey Base Coat Ceiling Plaster	(D)	Poor	High	None
11A	Medical Center Treatment Rooms	White Skim Coat Ceiling Plaster	(D)	Poor	High	None
11B	Medical Center Treatment Rooms	Light Grey Base Coat Ceiling Plaster	(D)	Poor	High	None
12A	Medical Center Treatment Rooms	White Skim Coat Ceiling Plaster	(D)	Poor	High	None
12B	Medical Center Treatment Rooms	Light Grey Base Coat Ceiling Plaster	(D)	Poor	High	None
13	Medical Center Walls – Various Areas	White / Brown Drywall	10,400 Sq Ft (E)	Poor	High	None
14	Medical Center Walls – Various Areas	White / Brown Drywall	(E)	Poor	High	None

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
15	Medical Center Walls – Various Areas	White / Brown Drywall	(E)	Poor	High	None
16	Medical Center Walls – Various Areas	Light Beige Joint Compound	Unknown	Poor	High	2 %
17	Medical Center Walls – Various Areas	Light Beige Joint Compound	Unknown	Poor	High	2 %
18	Medical Center Walls – Various Areas	Light Beige Joint Compound	Unknown	Poor	High	2 %
19A	Medical Center 16" Air Duct Lines	Off White / Brown Wrap	150 Ln Ft (F)	Poor	High	None
19B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
20A	Medical Center 16" Air Duct Lines	Off White / Brown Wrap	(F)	Poor	High	None
20B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
21A	Medical Center 16" Air Duct Lines	Off White / Brown Wrap	(F)	Poor	High	None
21B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
22A	Medical Center 16" Air Duct Lines	Green / Brown Wrap	(F)	Poor	High	None
22B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
23A	Medical Center 16" Air Duct Lines	Green / Brown Wrap	(F)	Poor	High	None
23B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
24A	Medical Center 16" Air Duct Lines	Green / Brown Wrap	(F)	Poor	High	None
24B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None

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 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
25A	Medical Center 16" Air Duct Lines	White / Brown Wrap	(F)	Poor	High	None
25B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
26A	Medical Center 16" Air Duct Lines	White / Brown Wrap	(F)	Poor	High	None
26B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
27A	Medical Center 16" Air Duct Lines	White / Brown Wrap	(F)	Poor	High	None
27B	Medical Center 16" Air Duct Lines	Yellow TSI Fiberglass	(F)	Poor	High	None
28A	Medical Center 16" Air Duct Lines	White Wrap	4 Fittings Visible (G)	Poor	High	None
28B	Medical Center 16" Air Duct Lines	Grey Fitting Mud	(G)	Poor	High	None
28C	Medical Center 16" Air Duct Lines	Silver / Brown Wrap	(G)	Poor	High	None
28D	Medical Center 16" Air Duct Lines	Yellow Insulation	(G)	Poor	High	None

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 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
29A	Medical Center 16" Air Duct Lines	White / Brown Wrap	(G)	Poor	High	None
29B	Medical Center 16" Air Duct Lines	Light Grey Fitting Mud	(G)	Poor	High	None
29C	Medical Center 16" Air Duct Lines	Silver / Brown Wrap	(G)	Poor	High	None
29D	Medical Center 16" Air Duct Lines	Yellow Insulation	(G)	Poor	High	None
30A	Medical Center 16" Air Duct Lines	White Wrap	(G)	Poor	High	None
30B	Medical Center 16" Air Duct Lines	Grey Fitting Mud	(G)	Poor	High	None
30C	Medical Center 16" Air Duct Lines	Silver / Brown Wrap	(G)	Poor	High	None
30D	Medical Center 16" Air Duct Lines	Yellow Insulation	(G)	Poor	High	None
31A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	700 Ln Ft Visible (H)	Poor	High	None
31B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None

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 Gibsonsia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
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Building Inspection Results

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 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
32A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
32B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None
33A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
33B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None
34A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
34B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None
35A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
35B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None
36A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
36B	Medical Center 4" Water Lines Throughout	Brown / Yellow TSI Fiberglass	(H)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
37	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	60 Fittings Visible (I)	Poor	High	None
38	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	(I)	Poor	High	None
39	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	(I)	Poor	High	None
40A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
40B	Medical Center 4" Water Lines Throughout	Light Brown TSI Fiberglass	(H)	Poor	High	None
41A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
41B	Medical Center 4" Water Lines Throughout	Light Brown TSI Fiberglass	(H)	Poor	High	None
42A	Medical Center 4" Water Lines Throughout	Tan / Black Wrap / Mastic	(H)	Poor	High	None
42B	Medical Center 4" Water Lines Throughout	Light Brown TSI Fiberglass	(H)	Poor	High	None
43	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	(I)	Poor	High	None
44	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	(I)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
45	Medical Center 4" Water Lines Throughout	Light Grey Fitting Mud	(1)	Poor	High	None
46	Medical Center 4" Water Lines Throughout	White / Light Grey Fitting Mud	(1)	Poor	High	None
47	Medical Center 4" Water Lines Throughout	White / Light Grey Fitting Mud	(1)	Poor	High	None
48	Medical Center 4" Water Lines Throughout	White / Light Grey Fitting Mud	(1)	Poor	High	None
49	Medical Center Room at End of Treatment Area – 8" Line	White TSI Mag.	12 Ln Ft (J)	Poor	High	15 %
50	Medical Center Room at End of Treatment Area – 8" Line	White TSI Mag.	(J)	Poor	High	15 %
51	Medical Center Room at End of Treatment Area – 8" Line	White TSI Mag.	(J)	Poor	High	15 %
52	Medical Center Room at End of Treatment Area – 4" Line	White TSI Mag.	8 Ln Ft (K)	Poor	High	15 %
53	Medical Center Room at End of Treatment Area – 4" Line	White TSI Mag.	(K)	Poor	High	15 %
54	Medical Center Room at End of Treatment Area – 4" Line	White TSI Mag.	(K)	Poor	High	15 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities throughout this survey for that particular material.

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
55A	Medical Center Throughout Halls & Various Rooms	Brown 4" Cove Base	1,450 Ln Ft (L)	Poor	High	None
55B	Medical Center Throughout Halls & Various Rooms	Brown Cove Base Adhesive	(L)	Poor	High	None
56A	Medical Center Throughout Halls & Various Rooms	Brown 4" Cove Base	(L)	Poor	High	None
56B	Medical Center Throughout Halls & Various Rooms	Brown Cove Base Adhesive	(L)	Poor	High	None
57A	Medical Center Throughout Halls & Various Rooms	Brown 4" Cove Base	(L)	Poor	High	None
57B	Medical Center Throughout Halls & Various Rooms	Brown Cove Base Adhesive	(L)	Poor	High	None
58	Medical Center Exterior Metal Doors	Clear / Grey Caulking	60 Ln Ft (M)	Poor	High	None
59	Medical Center Exterior Metal Doors	Clear / Grey Caulking	(M)	Poor	High	None
60	Medical Center Exterior Metal Doors	Clear / Grey Caulking	(M)	Poor	High	None
61	Medical Center Exterior Front Entrance	Black Caulking	80 Ln Ft (N)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Medical Center – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
62	Medical Center Exterior Front Entrance	Black Caulking	(N)	Poor	High	None
63	Medical Center Exterior Front Entrance	Black Caulking	(N)	Poor	High	None
64A	Medical Center Roof	Black Rubber	10,350 Sq Ft (O)	Poor	High	None
64B	Medical Center Roof	Yellow Block Insulation Styrofoam	(O)	Poor	High	None
65A	Medical Center Roof	Black Rubber	(O)	Poor	High	None
65B	Medical Center Roof	Black / Yellow Block Insulation Styrofoam	(O)	Poor	High	None
66A	Medical Center Roof	Black Rubber	(O)	Poor	High	None
66B	Medical Center Roof	Black / Yellow Block Insulation Styrofoam	(O)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-20-17 INSPECTOR: Edgar King

CLIENT: CEL

LOCATION: Mingo Junction steel North End Bldgs (medical center)

ADDRESS: Weirton WV.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain _____

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1

Main exterior building component (i.e. yellow brick, concrete block, etc...) Brick/metal

Please answer yes or no.

Was the basement included? NA Was the attic included? NA

Was the roof included? yes Is a map included? yes

Were any areas inaccessible? NO If yes, explain _____

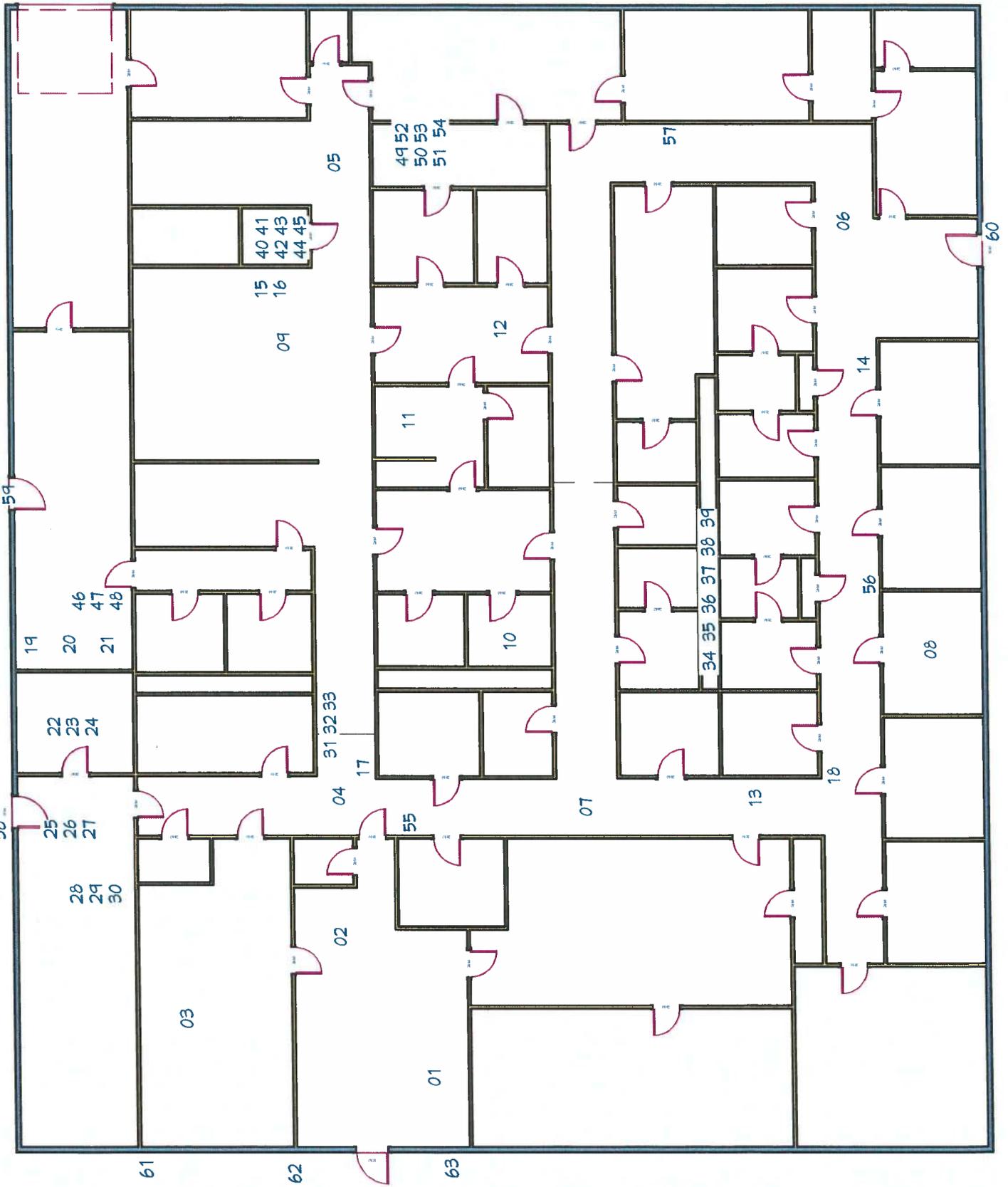
Were you accompanied by anyone yes If yes, who Aennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO Glazing

Any other important / relevant observations:

Appendix B – Sample Location Diagrams

Mingo Junction Steel Medical Building



Mingo Junction Steel Medical Building Roof

66

64

65

Appendix C – Laboratory Analysis Results



Please Reply To:

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

FACSIMILE TELECOPY TRANSMISSION

To: Tim Daniels
Mid Atlantic Environmental Consultants, Inc
Fax #:
Email: MIDATLANTIC@ZOOMINTERNET.NET

From: Gordon T. Saleeby
AmeriSci Job #: 117101967
Subject: PLM 5 day Results
Client Project: CEC-17-21; CEC; Mingo Junction
Steel Northend Bldgs Medical
Center

Date: Monday, October 30, 2017
Time: 15:45:43

Number of Pages: 25
(including cover sheet)

Comments:



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PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants,
 Attn: Tim Daniels
 5320 North Pioneer Road
 Gibsonia, PA 15044

Date Received 10/24/17
Date Examined 10/30/17

AmeriSci Job # 117101967
P.O. #
Page 1 of 19

RE: CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
 Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1 Location: Medical Center Lobby & Phys Therapy Area Analyst Description: White/Lt. Gray, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 65 %, Non-fibrous 35 %	117101967-01	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
2 Location: Medical Center Lobby & Phys Therapy Area Analyst Description: White/Lt. Gray, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 65 %, Non-fibrous 35 %	117101967-02	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
3 Location: Medical Center Lobby & Phys Therapy Area Analyst Description: White/Lt. Gray, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 65 %, Non-fibrous 35 %	117101967-03	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
4 Location: Medical Center Hallways & Rooms Thru-Out Analyst Description: White/Brown, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 40 %, Fibrous glass 30 %, Non-fibrous 30 %	117101967-04	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
5 Location: Medical Center Hallways & Rooms Thru-Out Analyst Description: White/Brown, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 40 %, Fibrous glass 30 %, Non-fibrous 30 %	117101967-05	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
6	117101967-06	No	NAD
Location: Medical Center Hallways & Rooms Thru-Out			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 40 %, Fibrous glass 30 %, Non-fibrous 30 %			
7	117101967-07L1	Yes	3 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Off-White/Lt. Beige, Homogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 3.0 % Other Material: Non-fibrous 97 %			
7	117101967-07L2	Yes	5 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic Asbestos Types: Chrysotile 5.0 % Other Material: Non-fibrous 95 %			
8	117101967-08L1	No	NAD
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow/Brown, Homogeneous, Non-Fibrous, Carpet Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
8	117101967-08L2	Yes	3 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Off-White/Lt. Beige, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 3.0 % Other Material: Non-fibrous 97 %			
8	117101967-08L3	Yes	5 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic Asbestos Types: Chrysotile 5.0 % Other Material: Non-fibrous 95 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
9	117101967-09L1	Yes	3 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Off-White/Lt. Beige, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 3.0 % Other Material: Non-fibrous 97 %			
9	117101967-09L2	Yes	5 %
Location: Medical Center Hallways & Rooms Thru-Out Some Under Carpet			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic Asbestos Types: Chrysotile 5.0 % Other Material: Non-fibrous 95 %			
10	117101967-10.1	No	NAD
Location: Medical Center Treatment Rooms			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White, Homogeneous, Non-Fibrous, Skim Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %			
10	117101967-10.2	No	NAD
Location: Medical Center Treatment Rooms			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Homogeneous, Non-Fibrous, Cementitious, Base Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %			
11	117101967-11.1	No	NAD
Location: Medical Center Treatment Rooms			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White, Homogeneous, Non-Fibrous, Skim Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %			
11	117101967-11.2	No	NAD
Location: Medical Center Treatment Rooms			(by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Homogeneous, Non-Fibrous, Cementitious, Base Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
12 Location: Medical Center Treatment Rooms Analyst Description: White, Homogeneous, Non-Fibrous, Skim Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %	117101967-12.1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
12 Location: Medical Center Treatment Rooms Analyst Description: Lt. Gray, Homogeneous, Non-Fibrous, Cementitious, Base Coat (Plaster) Asbestos Types: Other Material: Non-fibrous 100 %	117101967-12.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
13 Location: Medical Center Walls Various Areas Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 7 %, Non-fibrous 93 %	117101967-13	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
14 Location: Medical Center Walls Various Areas Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 7 %, Non-fibrous 93 %	117101967-14	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
15 Location: Medical Center Walls Various Areas Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 7 %, Non-fibrous 93 %	117101967-15	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
16 Location: Medical Center Walls Various Areas Analyst Description: Lt. Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %	117101967-16	Yes	2 % (by CVES) by Gordon T. Saleeby on 10/30/17

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
17	117101967-17	Yes	2 %
<p>Location: Medical Center Walls Various Areas</p> <p>Analyst Description: Lt. Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>
18	117101967-18	Yes	2 %
<p>Location: Medical Center Walls Various Areas</p> <p>Analyst Description: Lt. Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>
19	117101967-19.1	No	NAD
<p>Location: Medical Center Air Duct Lines 16"</p> <p>Analyst Description: Off-White/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 50 %, Fibrous glass 10 %, Non-fibrous 40 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>
19	117101967-19.2	No	NAD
<p>Location: Medical Center Air Duct Lines 16"</p> <p>Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>
20	117101967-20.1	No	NAD
<p>Location: Medical Center Air Duct Lines 16"</p> <p>Analyst Description: Off-White/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 50 %, Fibrous glass 10 %, Non-fibrous 40 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>
20	117101967-20.2	No	NAD
<p>Location: Medical Center Air Duct Lines 16"</p> <p>Analyst Description: Yellow, Homogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %</p>			<p>(by CVES) by Gordon T. Saleeby on 10/30/17</p>

PLM Bulk Asbestos Report
 CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
 Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
21	117101967-21.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Off-White/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 50 %, Fibrous glass 10 %, Non-fibrous 40 %			
21	117101967-21.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
22	117101967-22.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Green/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
22	117101967-22.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
23	117101967-23.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Green/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
23	117101967-23.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
24	117101967-24.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Green/Brown, Heterogeneous, Non-Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
24	117101967-24.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
25	117101967-25.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
25	117101967-25.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
26	117101967-26.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
26	117101967-26.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
27	117101967-27.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Wrap Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
27	117101967-27.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
28	117101967-28.1 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: White, Homogeneous, Fibrous, Wrap 1 Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %			
28	117101967-28.2 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Gray, Homogeneous, Fibrous, Insulation Mud Asbestos Types: Other Material: Fibrous glass 45 %, Non-fibrous 55 %			
28	117101967-28.3 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Silver/Brown, Homogeneous, Fibrous, Wrap 2 Asbestos Types: Other Material: Cellulose 50 %, Fibrous glass 10 %, Non-fibrous 40 %			
28	117101967-28.4 Location: Medical Center Air Duct Lines 16"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
29 Location: Medical Center Air Duct Lines 16" Analyst Description: White/Brown, Heterogeneous, Non-Fibrous, Wrap 1 Asbestos Types: Other Material: Cellulose 50 %, Fibrous glass 10 %, Non-fibrous 40 %	117101967-29.1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
29 Location: Medical Center Air Duct Lines 16" Analyst Description: Lt. Gray, Heterogeneous, Non-Fibrous, Insulation Mud Asbestos Types: Other Material: Fibrous glass 45 %, Non-fibrous 55 %	117101967-29.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
29 Location: Medical Center Air Duct Lines 16" Analyst Description: Silver/Brown, Heterogeneous, Non-Fibrous, Wrap 2 Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 45 %	117101967-29.3	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
29 Location: Medical Center Air Duct Lines 16" Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %	117101967-29.4	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
30 Location: Medical Center Air Duct Lines 16" Analyst Description: White, Homogeneous, Fibrous, Wrap 1 Asbestos Types: Other Material: Cellulose 55 %, Fibrous glass 5 %, Non-fibrous 40 %	117101967-30.1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
30 Location: Medical Center Air Duct Lines 16" Analyst Description: Gray, Homogeneous, Fibrous, Insulation Mud Asbestos Types: Other Material: Fibrous glass 45 %, Non-fibrous 55 %	117101967-30.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
30 Location: Medical Center Air Duct Lines 16"	117101967-30.3	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Silver/Brown, Heterogeneous, Non-Fibrous, Wrap 2 Asbestos Types: Other Material: Cellulose 55 %, Non-fibrous 45 %			
30 Location: Medical Center Air Duct Lines 16"	117101967-30.4	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
31 Location: Medical Center Water Lines About Thru-Out 4"	117101967-31L1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Homogeneous, Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			
31 Location: Medical Center Water Lines About Thru-Out 4"	117101967-31L2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown/Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
32 Location: Medical Center Water Lines About Thru-Out 4"	117101967-32L1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			
32 Location: Medical Center Water Lines About Thru-Out 4"	117101967-32L2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown/Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
33 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %	117101967-33L1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
33 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Brown/Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %	117101967-33L2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
34 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %	117101967-34L1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
34 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Brown/Yellow, Homogeneous, Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %	117101967-34L2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
35 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %	117101967-35L1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
35 Location: Medical Center Water Lines About Thru-Out 4" Analyst Description: Brown/Yellow, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %	117101967-35L2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos ReportCEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
36	117101967-36L1 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic			
Asbestos Types:			
Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			
36	117101967-36L2 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown/Yellow, Homogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
37	117101967-37 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %			
38	117101967-38 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %			
39	117101967-39 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %			
40	117101967-40L1 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic			
Asbestos Types:			
Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
40	117101967-40L2 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Brown, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
41	117101967-41L1 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			
41	117101967-41L2 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Brown, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
42	117101967-42L1 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Tan/Black, Heterogeneous, Non-Fibrous, Wrap/Mastic Asbestos Types: Other Material: Cellulose 45 %, Fibrous glass 5 %, Non-fibrous 50 %			
42	117101967-42L2 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Brown, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Fibrous glass 95 %, Non-fibrous 5 %			
43	117101967-43 Location: Medical Center Water Lines About Thru-Out 4"	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
<p>44</p> <p style="text-align: center;">Location: Medical Center Water Lines About Thru-Out 4"</p> <p>Analyst Description: Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %</p>	<p>117101967-44</p>	<p>No</p>	<p>NAD (by CVES) by Gordon T. Saleeby on 10/30/17</p>
<p>45</p> <p style="text-align: center;">Location: Medical Center Water Lines About Thru-Out 4"</p> <p>Analyst Description: Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %</p>	<p>117101967-45</p>	<p>No</p>	<p>NAD (by CVES) by Gordon T. Saleeby on 10/30/17</p>
<p>46</p> <p style="text-align: center;">Location: Medical Center Water Lines About Thru-Out 4"</p> <p>Analyst Description: White/Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %</p>	<p>117101967-46</p>	<p>No</p>	<p>NAD (by CVES) by Gordon T. Saleeby on 10/30/17</p>
<p>47</p> <p style="text-align: center;">Location: Medical Center Water Lines About Thru-Out 4"</p> <p>Analyst Description: White/Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %</p>	<p>117101967-47</p>	<p>No</p>	<p>NAD (by CVES) by Gordon T. Saleeby on 10/30/17</p>
<p>48</p> <p style="text-align: center;">Location: Medical Center Water Lines About Thru-Out 4"</p> <p>Analyst Description: White/Lt. Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 25 %, Non-fibrous 60 %</p>	<p>117101967-48</p>	<p>No</p>	<p>NAD (by CVES) by Gordon T. Saleeby on 10/30/17</p>
<p>49</p> <p style="text-align: center;">Location: Medical Center Room At End Of Treatment Area 8"</p> <p>Analyst Description: White, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Amosite 15.0 % Other Material: Cellulose 15 %, Non-fibrous 70 %</p>	<p>117101967-49</p>	<p>Yes</p>	<p>15 % (by CVES) by Gordon T. Saleeby on 10/30/17</p>

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
50	117101967-50	Yes	15 %
<p style="margin-left: 40px;">Location: Medical Center Room At End Of Treatment Area 8"</p> <p style="margin-left: 40px;">Analyst Description: White, Heterogeneous, Fibrous, Bulk Material</p> <p style="margin-left: 40px;">Asbestos Types: Amosite 15.0 %</p> <p style="margin-left: 40px;">Other Material: Cellulose 15 %, Non-fibrous 70 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>
51	117101967-51	Yes	15 %
<p style="margin-left: 40px;">Location: Medical Center Room At End Of Treatment Area 8"</p> <p style="margin-left: 40px;">Analyst Description: White, Heterogeneous, Fibrous, Bulk Material</p> <p style="margin-left: 40px;">Asbestos Types: Amosite 15.0 %</p> <p style="margin-left: 40px;">Other Material: Cellulose 15 %, Non-fibrous 70 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>
52	117101967-52	Yes	15 %
<p style="margin-left: 40px;">Location: Medical Center Room At End Of Treatment Area 4"</p> <p style="margin-left: 40px;">Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material</p> <p style="margin-left: 40px;">Asbestos Types: Amosite 15.0 %</p> <p style="margin-left: 40px;">Other Material: Cellulose 15 %, Non-fibrous 70 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>
53	117101967-53	Yes	15 %
<p style="margin-left: 40px;">Location: Medical Center Room At End Of Treatment Area 4"</p> <p style="margin-left: 40px;">Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material</p> <p style="margin-left: 40px;">Asbestos Types: Chrysotile <1. %, Amosite 15.0 %</p> <p style="margin-left: 40px;">Other Material: Cellulose 15 %, Non-fibrous 70 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>
54	117101967-54	Yes	15 %
<p style="margin-left: 40px;">Location: Medical Center Room At End Of Treatment Area 4"</p> <p style="margin-left: 40px;">Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material</p> <p style="margin-left: 40px;">Asbestos Types: Chrysotile <1. %, Amosite 15.0 %</p> <p style="margin-left: 40px;">Other Material: Cellulose 15 %, Non-fibrous 70 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>
55	117101967-55L1	No	NAD
<p style="margin-left: 40px;">Location: Medical Center Thru-Out Halls & Various Doors</p> <p style="margin-left: 40px;">Analyst Description: Brown, Homogeneous, Non-Fibrous, Base Cove</p> <p style="margin-left: 40px;">Asbestos Types:</p> <p style="margin-left: 40px;">Other Material: Non-fibrous 100 %</p>			<p>(by CVES)</p> <p>by Gordon T. Saleeby on 10/30/17</p>

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
55	117101967-55L2 Location: Medical Center Thru-Out Halls & Various Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
56	117101967-56L1 Location: Medical Center Thru-Out Halls & Various Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Base Cove Asbestos Types: Other Material: Non-fibrous 100 %			
56	117101967-56L2 Location: Medical Center Thru-Out Halls & Various Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
57	117101967-57L1 Location: Medical Center Thru-Out Halls & Various Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Base Cove Asbestos Types: Other Material: Non-fibrous 100 %			
57	117101967-57L2 Location: Medical Center Thru-Out Halls & Various Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
58	117101967-58 Location: Medical Center Exterior Metal Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Clear/Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
59	117101967-59 Location: Medical Center Exterior Metal Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Clear/Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
60	117101967-60 Location: Medical Center Exterior Metal Doors	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Clear/Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
61	117101967-61 Location: Medical Center Exterior Metal Front Entrance	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
62	117101967-62 Location: Medical Center Exterior Metal Front Entrance	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
63	117101967-63 Location: Medical Center Exterior Metal Front Entrance	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Non-fibrous 100 %			
64	117101967-64.1 Location: Medical Center Roof	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Rubber Asbestos Types: Other Material: Non-fibrous 100 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
64 Location: Medical Center Roof Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Block Insulation Asbestos Types: Other Material: Cellulose 10 %, Fibrous glass 3 %, Non-fibrous 87 %	117101967-64.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
65 Location: Medical Center Roof Analyst Description: Black, Heterogeneous, Non-Fibrous, Rubber Asbestos Types: Other Material: Non-fibrous 100 %	117101967-65.1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
65 Location: Medical Center Roof Analyst Description: Black/Yellow, Heterogeneous, Non-Fibrous, Block Insulation Asbestos Types: Other Material: Cellulose 10 %, Fibrous glass 3 %, Non-fibrous 87 %	117101967-65.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
66 Location: Medical Center Roof Analyst Description: Black, Heterogeneous, Non-Fibrous, Rubber Asbestos Types: Other Material: Non-fibrous 100 %	117101967-66.1	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17
66 Location: Medical Center Roof Analyst Description: Black/Yellow, Heterogeneous, Non-Fibrous, Block Insulation Asbestos Types: Other Material: Cellulose 10 %, Fibrous glass 3 %, Non-fibrous 87 %	117101967-66.2	No	NAD (by CVES) by Gordon T. Saleeby on 10/30/17

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Northend Bldgs
Medical Center

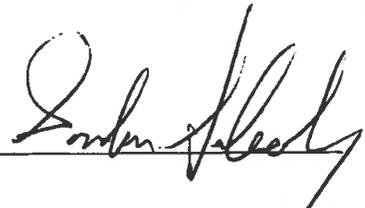
Reporting Notes:

Analyzed by: Gordon T. Saleeby



Date: 10/30/2017

Reviewed by:



*NAD = no asbestos detected, Detection Limit <1%. Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.



5320 N. Pioneer Road
 Gibsonia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101967

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		PM Asbestos	Standard
66			

Project Site: Mingo Junction steel Northend Bldgs Medical Center Sampler Signature: [Signature] JN# CEC1721
 Client / Address: CEC Phone: _____ Fax: _____
 Relinquished By: Edgar King Date: 10-23-17 Time: 6:00
 Relinquished By: Wiley Reed Date: 10/23/17 Time: 9:33am
 Received By (AmeriSci) _____ Date: _____ Time: _____

- Additional Information:
- Please indicate Mid Atlantic's job # on all results and invoices
 - Email results to midatlantica@zoominternet.net

RECEIVED
 OCT 24 2017
 By AW

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # A1009156

Issued: 3/13/2017

Expires: 3/31/2018

Walter M. Dwyer

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

Walter M. Sweg

Director
WV OEHS

WEST VIRGINIA

Asbestos Program



Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN

**ASBESTOS LABORATORY -
AIR AND BULK**

License # LT000563

Issued: 5/31/2017

Expires: 5/31/2018

Walter M. Drey

Director
WV OEHS

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants
5320 N. Pioneer Road
Gibsonia, PA 15044

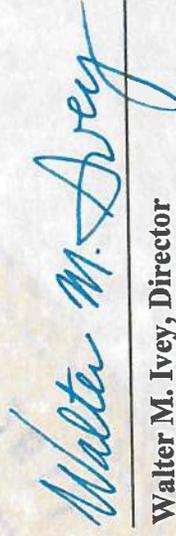
Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



Walter M. Ivey, Director
Office of Environmental Health Services

APPENDIX B
CONTRACTOR COST ESTIMATES

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL A (LADLE HOUSE)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

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FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report
Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel A – Ladle House (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 0.34 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former Ladle House, a 15,000 square foot steel-framed and sided structure with concrete foundations and floors. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Ladle House was constructed in the early 1900s as part of the former Weirton Steel facility. The building was historically used to perform maintenance on ladles used to transport molten iron from the nearby blast furnaces to the open hearth furnace. The iron and steel making operations of the facility ceased around 2011 and the Ladle House has remained vacant since that time.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. Thirty five (35) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in 14 samples associated primarily with pipe insulation. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-contaminated debris that will result from the demolition of the ticket booth will be disposed at an off-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$72,000
Third Party Air Sampling.....	\$1,000
Project Management	\$2,000
Total	\$76,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

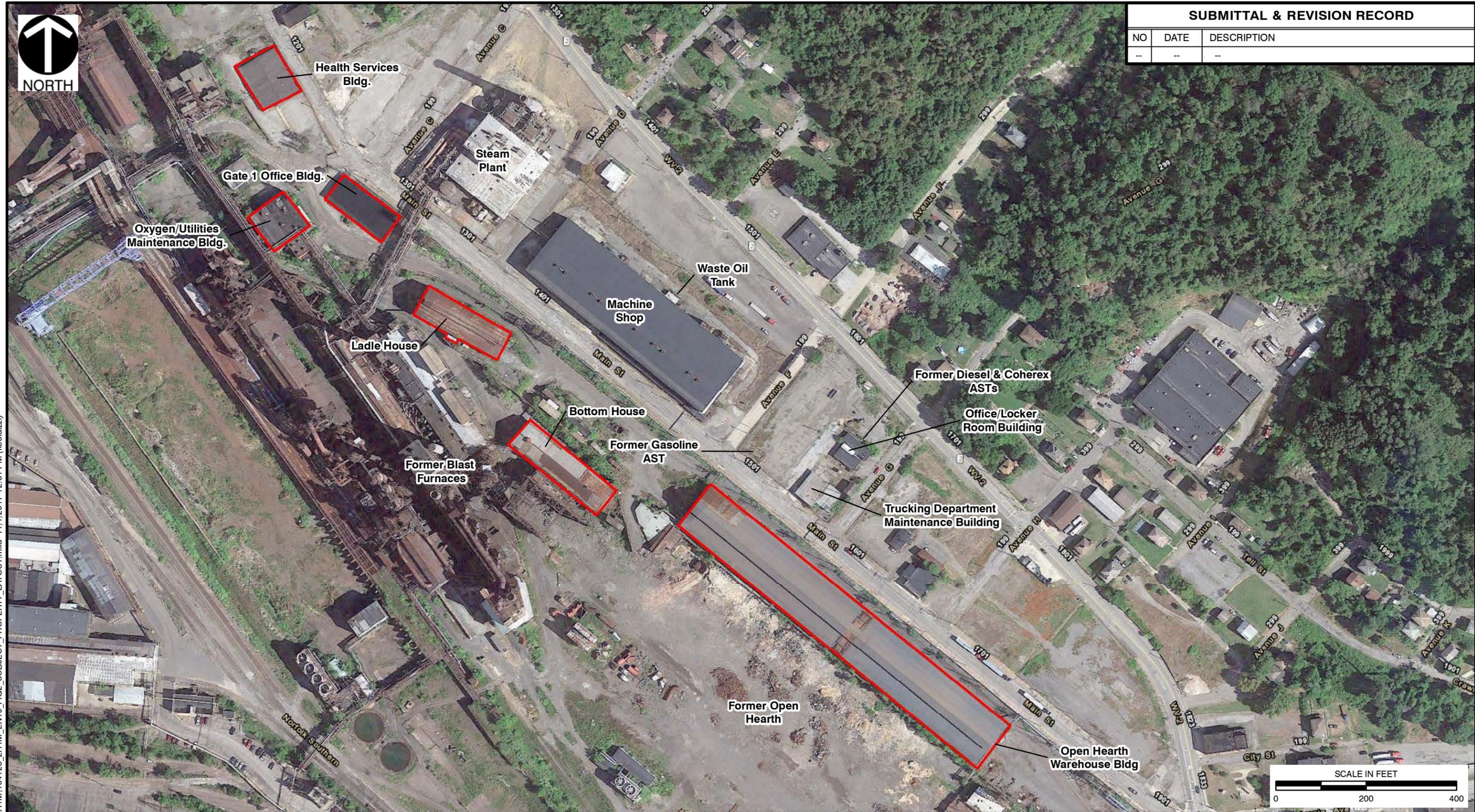
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.

Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M_EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

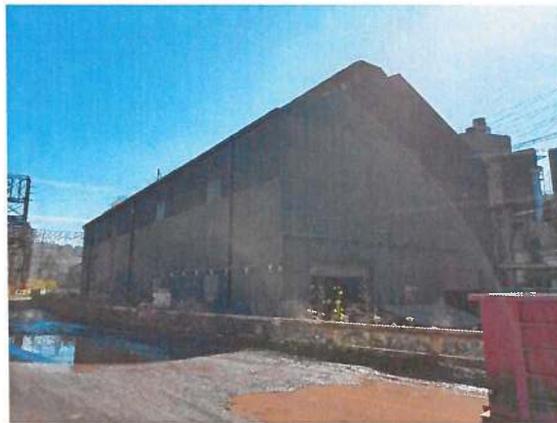
DRAFT

APPENDIX A

EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
LADLE HOUSE
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX

midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

November 2, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Ladle House Building

To Whom It May Concern:

On Thursday, October 19th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Former Ladle House Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement and / or demolition activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Edgar J. King'.

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink, appearing to read 'Tim Daniels'.

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings - Former Ladle House Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Ladle House Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Ladle House Building was un-occupied and in poor condition. There was no access to the rooftop at the time of this survey although it visually appeared to be the same metal as the rest of the building with no visible signs of caulking or tar. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials that may impact planned future demolition of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building. A total of eighteen (18) samples, (35) including splits were collected at this time. Of those samples, fourteen (14) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B- for Sample Location Diagrams.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
Black Wrap	Ladle House Inside 4" Pipe Left Side High Line	160 Ln Ft	Non-Friable	70-80 % Chrysotile
Black Wrap	Ladle House Inside 4" Pipe Left Side High Line	160 Ln Ft	Non-Friable	80 % Chrysotile
Black Wrap	Ladle House Inside 6" Pipe Left Side High Line	160 Ln Ft	Non-Friable	40-70 % Chrysotile
White TSI	Ladle House Inside 4" Pipe Right Side	170 Ln Ft	Friable	10% Amosite
White TSI	Ladle House Inside 6" Pipe Right Side	170 Ln Ft	Friable	2% Chrysotile 20% Amosite
Black Wrap	Ladle House Inside 6" Pipe Right Side	170 Ln Ft	Non-Friable	40-50 % Chrysotile

North End Buildings - Former Ladle House Building

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

Refer to appendices for further information.

Appendix A—Building Inspection Results

Appendix B—Sample Location Diagram

Appendix C—Laboratory Analysis Results

Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— November 2, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Ladle House Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the rooftop) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Ladle House – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01A	Ladle House Inside 4" Pipe Left Side Low Line	White TSI	150 Ln Ft (A)	Poor	High	None
01B	Ladle House Inside 4" Pipe Left Side Low Line	Black Tar	(A)	Poor	High	None
02A	Ladle House Inside 4" Pipe Left Side Low Line	White TSI	(A)	Poor	High	None
02B	Ladle House Inside 4" Pipe Left Side Low Line	Black Tar	(A)	Poor	High	None
03A	Ladle House Inside 4" Pipe Left Side Low Line	White TSI	(A)	Poor	High	None
03B	Ladle House Inside 4" Pipe Left Side Low Line	Black Tar	(A)	Poor	High	None
04A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	160 Ln Ft (B)	Poor	High	None
04B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(B)	Poor	High	80 %
05A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	160 Ln Ft (C)	Poor	High	None
05B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(C)	Poor	High	80 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
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 Gibsonia, PA 15044
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Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Ladle House – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
06A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	(B)	Poor	High	None
06B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(B)	Poor	High	80 %
07A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	(C)	Poor	High	None
07B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(C)	Poor	High	80 %
08A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	(B)	Poor	High	None
08B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(B)	Poor	High	70 %
09A	Ladle House Inside 4" Pipe Left Side High Line	Black / Brown TSI	(C)	Poor	High	None
09B	Ladle House Inside 4" Pipe Left Side High Line	Black Wrap	(C)	Poor	High	80 %
10A	Ladle House Inside 6" Pipe Left Side High Line	Black / Brown TSI	160 Ln Ft (D)	Poor	High	None
10B	Ladle House Inside 6" Pipe Left Side High Line	Black Wrap	(D)	Poor	High	40 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
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 Gibsonsia, PA 15044
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 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Ladle House – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
11A	Ladle House Inside 6" Pipe Left Side High Line	Black / Brown TSI	(D)	Poor	High	None
11B	Ladle House Inside 6" Pipe Left Side High Line	Black Wrap	(D)	Poor	High	70 %
12A	Ladle House Inside 6" Pipe Left Side High Line	Black / Brown TSI	(D)	Poor	High	None
12B	Ladle House Inside 6" Pipe Left Side High Line	Black Wrap	(D)	Poor	High	50 %
13	Ladle House Inside 4" Pipe Right Side	White TSI	170 Ln Ft (E)	Poor	High	10 %
14A	Ladle House Inside 6" Pipe Right Side	White TSI	170 Ln Ft (F)	Poor	High	22 %
14B	Ladle House Inside 6" Pipe Right Side	Black Wrap	(F)	Poor	High	50 %
15A	Ladle House Inside 4" Pipe Right Side	White TSI	(E)	Poor	High	None
15B	Ladle House Inside 4" Pipe Right Side	Black Tar	(E)	Poor	High	None

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

Mid Atlantic Environmental Consultants, Inc.
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 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 19, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Ladle House – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
16A	Ladle House Inside 6" Pipe Right Side	White TSI	(F)	Poor	High	None
16B	Ladle House Inside 6" Pipe Right Side	Black Tar	(F)	Poor	High	None
17A	Ladle House Inside 4" Pipe Right Side	White TSI	(E)	Poor	High	None
17B	Ladle House Inside 4" Pipe Right Side	Black tar	(E)	Poor	High	None
18A	Ladle House Inside 6" Pipe Right Side	White TSI	(F)	Poor	High	20 %
18B	Ladle House Inside 6" Pipe Right Side	Black Wrap	(F)	Poor	High	40 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-19-17 INSPECTOR: Eddy or KMS

CLIENT: CEC

LOCATION: Mingo Junction North End Bldgs. (Ladle House)

ADDRESS: Winton W.U.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain NO ROOF ACCESS BUT USUALLY LOOKS LIKE METAL

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1

Main exterior building component (i.e. yellow brick, concrete block, etc...) metal siding

Please answer yes or no.

Was the basement included? NA Was the attic included? NA

Was the roof included? NO ACCESS. Is a map included? yes

Were any areas inaccessible? yes If yes, explain Roof

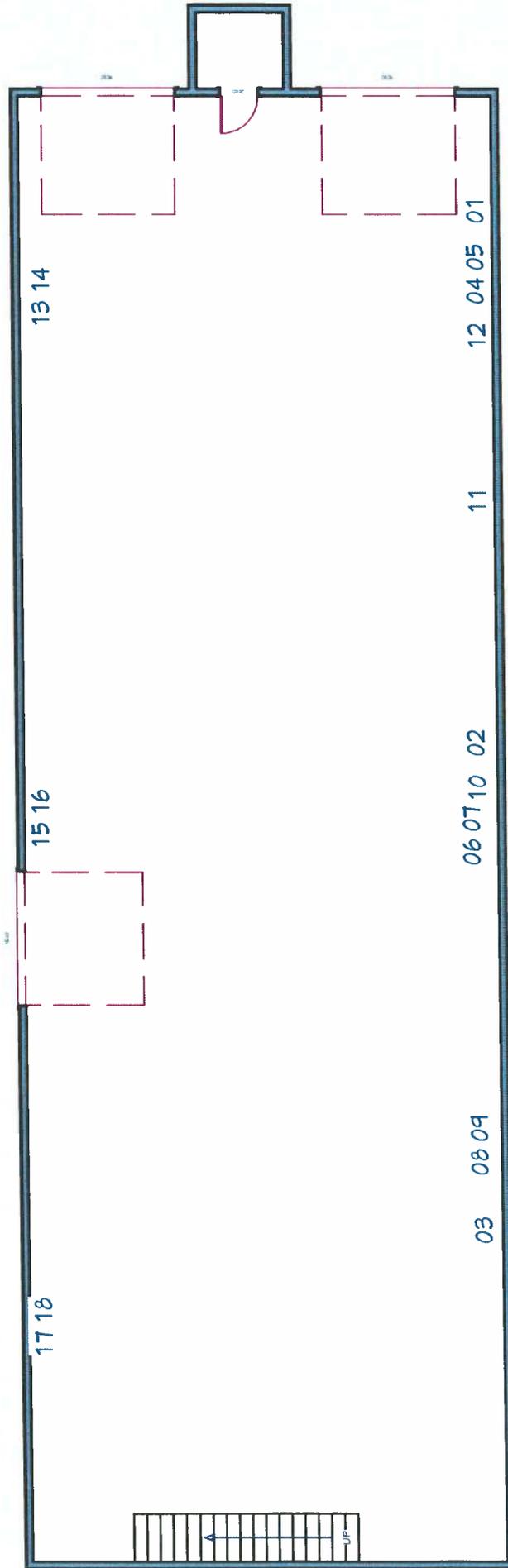
Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain NO plaster, Tile, caulking, Glazings

Any other important / relevant observations:

Appendix B – Sample Location Diagram

Mingo Junction Steel
Ladle House Building



Appendix C – Laboratory Analysis Results



5320 N. Pioneer Road
 Gibsonia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101881

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		PLM Asbestos	standard
18			

Project Site: Mingo Junction Steel mill on Ledge House Sampler Signature: [Signature] JN# CEC-17-21

Client / Address: LEL Phone: _____ Fax: _____

Relinquished By: Edgar King Date: 10-20-17 Time: 0600

Relinquished By: Shelley Burch Date: 10/20/17 Time: 8:06am

Received By (AmeriSci) _____ Date: _____ Time: _____

Additional Information:

- Please indicate Mid Atlantic's job # on all results and invoices
- Email results to midatlantic@zoominternet.net

RECEIVED
 OCT 28 2017
 By aru



AmeriSci Richmond
 13635 GENITO ROAD
 MIDLOTHIAN, VIRGINIA 23112
 TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants,
 Attn: Tim Daniels
 5320 North Pioneer Road
 Gibsonia, PA 15044

Date Received 10/23/17
Date Examined 10/27/17

AmeriSci Job # 117101881
P.O. #
Page 1 of 7

RE: CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
01 Location: Ladle House Inside 4" Pipe Left Side Low Line Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Cellulose 20 %, Non-fibrous 80 %	117101881-01.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
01 Location: Ladle House Inside 4" Pipe Left Side Low Line Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Asbestos Types: Other Material: Cellulose 3 %, Non-fibrous 97 %	117101881-01.2	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
02 Location: Ladle House Inside 4" Pipe Left Side Low Line Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Cellulose 20 %, Non-fibrous 80 %	117101881-02.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
02 Location: Ladle House Inside 4" Pipe Left Side Low Line Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %	117101881-02.2	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
03 Location: Ladle House Inside 4" Pipe Left Side Low Line Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Cellulose 20 %, Non-fibrous 80 %	117101881-03.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
03	117101881-03.2 Location: Ladle House Inside 4" Pipe Left Side Low Line	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %			
04	117101881-04.1 Location: Ladle House Inside 4" Pipe Left Side High Lines	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 85 %, Non-fibrous 15 %			
04	117101881-04.2 Location: Ladle House Inside 4" Pipe Left Side High Lines	Yes	80 % (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 80.0 % Other Material: Non-fibrous 20 %			
05	117101881-05.1 Location: Ladle House Inside 4" Pipe Left Side High Lines	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 90 %, Non-fibrous 10 %			
05	117101881-05.2 Location: Ladle House Inside 4" Pipe Left Side High Lines	Yes	80 % (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 80.0 % Other Material: Non-fibrous 20 %			
06	117101881-06.1 Location: Ladle House Inside 4" Pipe Left Side High Lines	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 90 %, Non-fibrous 10 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
06 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 80.0 % Other Material: Non-fibrous 20 %	117101881-06.2	Yes	80 % (by CVES) by Jean L. Mayes on 10/27/17
07 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 90 %, Non-fibrous 10 %	117101881-07.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
07 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 80.0 % Other Material: Non-fibrous 20 %	117101881-07.2	Yes	80 % (by CVES) by Jean L. Mayes on 10/27/17
08 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 90 %, Non-fibrous 10 %	117101881-08.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
08 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 70.0 % Other Material: Non-fibrous 30 %	117101881-08.2	Yes	70 % (by CVES) by Jean L. Mayes on 10/27/17
09 Location: Ladle House Inside 4" Pipe Left Side High Lines Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Other Material: Animal hair 90 %, Non-fibrous 10 %	117101881-09.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
09	117101881-09.2	Yes	80 %
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap			
Asbestos Types: Chrysotile 80.0 %			
Other Material: Non-fibrous 20 %			
10	117101881-10.1	No	NAD
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Non-fibrous 10 %			
10	117101881-10.2	Yes	40 %
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap			
Asbestos Types: Chrysotile 40.0 %			
Other Material: Cellulose 30 %, Non-fibrous 30 %			
11	117101881-11.1	No	NAD
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Non-fibrous 10 %			
11	117101881-11.2	Yes	70 %
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap			
Asbestos Types: Chrysotile 70.0 %			
Other Material: Non-fibrous 30 %			
12	117101881-12.1	No	NAD
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black/Brown, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Non-fibrous 10 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
12	117101881-12.2	Yes	50 %
Location: Ladle House Inside 4" Pipe Left Side High Lines			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Fibrous, Wrap			
Asbestos Types: Chrysotile 50.0 %			
Other Material: Cellulose 10 %, Non-fibrous 40 %			
13	117101881-13	Yes	10 %
Location: Ladle House Inside 4" Pipe Right Side			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Amosite 10.0 %			
Other Material: Non-fibrous 90 %			
14	117101881-14.1	Yes	22 %
Location: Ladle House Inside 4" Pipe Right Side			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation			
Asbestos Types: Chrysotile 2.0 %, Amosite 20.0 %			
Other Material: Non-fibrous 78 %			
14	117101881-14.2	Yes	50 %
Location: Ladle House Inside 4" Pipe Right Side			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Wrap			
Asbestos Types: Chrysotile 50.0 %			
Other Material: Cellulose 20 %, Non-fibrous 30 %			
15	117101881-15.1	No	NAD
Location: Ladle House Inside 4" Pipe Right Side			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation			
Asbestos Types:			
Other Material: Cellulose 20 %, Non-fibrous 80 %			
15	117101881-15.2	No	NAD
Location: Ladle House Inside 4" Pipe Right Side			(by CVES) by Jean L. Mayes on 10/27/17
Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Cellulose 10 %, Non-fibrous 90 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
16 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Cellulose 20 %, Non-fibrous 80 %	117101881-16.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
16 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Asbestos Types: Other Material: Cellulose 15 %, Non-fibrous 85 %	117101881-16.2	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
17 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Other Material: Cellulose 20 %, Non-fibrous 80 %	117101881-17.1	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
17 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: Black, Heterogeneous, Non-Fibrous, Tar Asbestos Types: Other Material: Cellulose 15 %, Non-fibrous 85 %	117101881-17.2	No	NAD (by CVES) by Jean L. Mayes on 10/27/17
18 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: White, Heterogeneous, Non-Fibrous, Insulation Asbestos Types: Amosite 20.0 % Other Material: Non-fibrous 80 %	117101881-18.1	Yes	20 % (by CVES) by Jean L. Mayes on 10/27/17
18 Location: Ladle House Inside 4" Pipe Right Side Analyst Description: Black, Heterogeneous, Fibrous, Wrap Asbestos Types: Chrysotile 40.0 % Other Material: Cellulose 40 %, Non-fibrous 20 %	117101881-18.2	Yes	40 % (by CVES) by Jean L. Mayes on 10/27/17

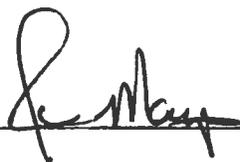
Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

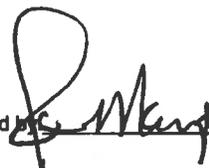
CEC-17-21; CEC; Mingo Junction Steel Weirton Ladle House

Reporting Notes:

Analyzed by: Jean L. Mayes



Date: 10/27/2017 Reviewed by:



*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; *Present* or NVA = *No Visible Asbestos* are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # A1009156

Issued: 3/13/2017

Expires: 3/31/2018

Walter M. Arvey

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

William M. Arvey

Director
WV OEHS

WEST VIRGINIA

Asbestos Program

Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN
**ASBESTOS LABORATORY -
AIR AND BULK**



License # LT000563
Issued: 5/31/2017
Expires: 5/31/2018

Director
WV OEHS

Walter M. Arvey

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants

5320 N. Pioneer Road
Gibsonia, PA 15044

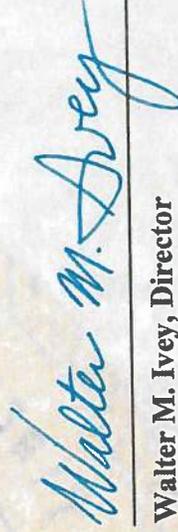
Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



Walter M. Ivey, Director
Office of Environmental Health Services

DRAFT

APPENDIX B

CONTRACTOR COST ESTIMATES

**ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES
MINGO JUNCTION STEEL WORKS PARCEL C
(OPEN HEARTH WAREHOUSE)
NORTH MAIN STREET
WEIRTON, HANCOCK COUNTY, WEST VIRGINIA**

Prepared For:

**BUSINESS DEVELOPMENT CORPORATION
OF THE NORTHERN PANHANDLE
WEIRTON, WEST VIRGINIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
EXPORT, PENNSYLVANIA**

CEC Project 164-123.2H2M

November 2017

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1.0 Introduction and Background	1
1.1 Introduction.....	1
1.2 Site Description and Historical Use	1
1.3 Previous Site Investigation and Remediation Activities.....	1
1.4 Site Re-Use Plans.....	1
2.0 Applicable Regulations and Cleanup Standards	2
3.0 Evaluation of Cleanup Alternatives	3
3.1. Cleanup Alternatives and Estimated Costs	3
3.2 Recommended Cleanup Alternative	3
3.3 Consideration of Changing Climate.....	3

FIGURES

Figure 1 – Site Layout

APPENDICES

Appendix A – Excerpt from Asbestos Survey Report
Appendix B – Contractor Cost Estimates

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) for the Mingo Junction Steel Works North Weirton Parcel C – Open Hearth Warehouse (Site) was prepared by Civil & Environmental Consultants, Inc. (CEC) on behalf of the current Site owner, the Business Development Corporation of the Northern Panhandle (BDC). The BDC plans to submit an application to the U.S. Environmental Protection Agency (USEPA) for a Brownfields Cleanup Grant to be used for cleanup of the Site.

1.2 SITE DESCRIPTION AND HISTORICAL USE

The Site covers approximately 2 acres and is located along North Main Street in the City of Weirton, Hancock County, West Virginia. The Site contains the former Open Hearth Warehouse, a 88,200 square foot steel-framed and sided structure with concrete foundations and floors. The Site is located in a mixed-use area consisting of commercial, industrial and residential properties. The Site layout is shown on Figure 1.

The Open Hearth Warehouse was constructed in the early 1900s as part of the former Weirton Steel facility. The building was historically used to store materials and supplies related to the operation of the former open hearth furnace. The iron and steel making operations of the facility ceased around 2011. The building has continued to be used for the storage of materials and supplies related to other operations at the facility.

1.3 PREVIOUS SITE INVESTIGATION AND REMEDIATION ACTIVITIES

CEC performed a Phase I Environmental Site Assessment (ESA) of the Site in November 2017. No Recognized Environmental Conditions (RECs) were identified. However, the Phase I ESA did identify the potential for asbestos-containing materials (ACM) given the age and construction of the building.

Mid Atlantic Environmental Consultants, Inc., a West Virginia-licensed asbestos inspector, completed an ACM survey in October 2017. Twelve (12) samples of suspect ACM were collected and analyzed for asbestos. Asbestos was identified in six samples associated primarily with pipe wrap/insulation. Some of the identified ACM is friable and creates a potential health hazard. Excerpts from Mid Atlantic's ACM survey report are provided in Appendix A. This ABCA addresses the abatement of ACM that is required prior to the renovation and reuse of the building.

1.4 SITE RE-USE PLANS

The BDC has been in contact with a prospective purchaser that has interest in repurposing the Site as a metal manufacturing/fabricating operation and chemical processing facility. Other potential reuses include operations to support the growing natural gas industry in the Ohio River Valley.

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The asbestos removal and renovation work will be performed in accordance with the requirements of West Virginia Code 45CSR15 and 64CSR63. All required notifications will be made and the work will be performed by a West Virginia Bureau of Public Health licensed asbestos contractor. The lead-contaminated debris that will result from the demolition of the ticket booth will be disposed at an off-site permitted landfill in accordance with 40CFR260 and other applicable laws and regulations.

DRAFT

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 CLEANUP ALTERNATIVES AND ESTIMATED COSTS

Removing the ACM prior to renovating the building is required by West Virginia law. There are no other viable alternatives (other than no action, in which case the building could not be renovated and reused according to current plans).

The estimated cost to complete the ACM removal is as follows:

Work Plan and Notifications.....	\$1,500
ACM Removal/Disposal.....	\$174,000
Third Party Air Sampling.....	\$2,000
Project Management	\$3,000
Total	\$180,500

Contractor proposals that were used as the basis for the above cost estimates are provided in Appendix B.

3.2 RECOMMENDED CLEANUP ALTERNATIVE

Again, removing the ACM prior to renovation is the only viable alternative.

3.3 CONSIDERATION OF CHANGING CLIMATE

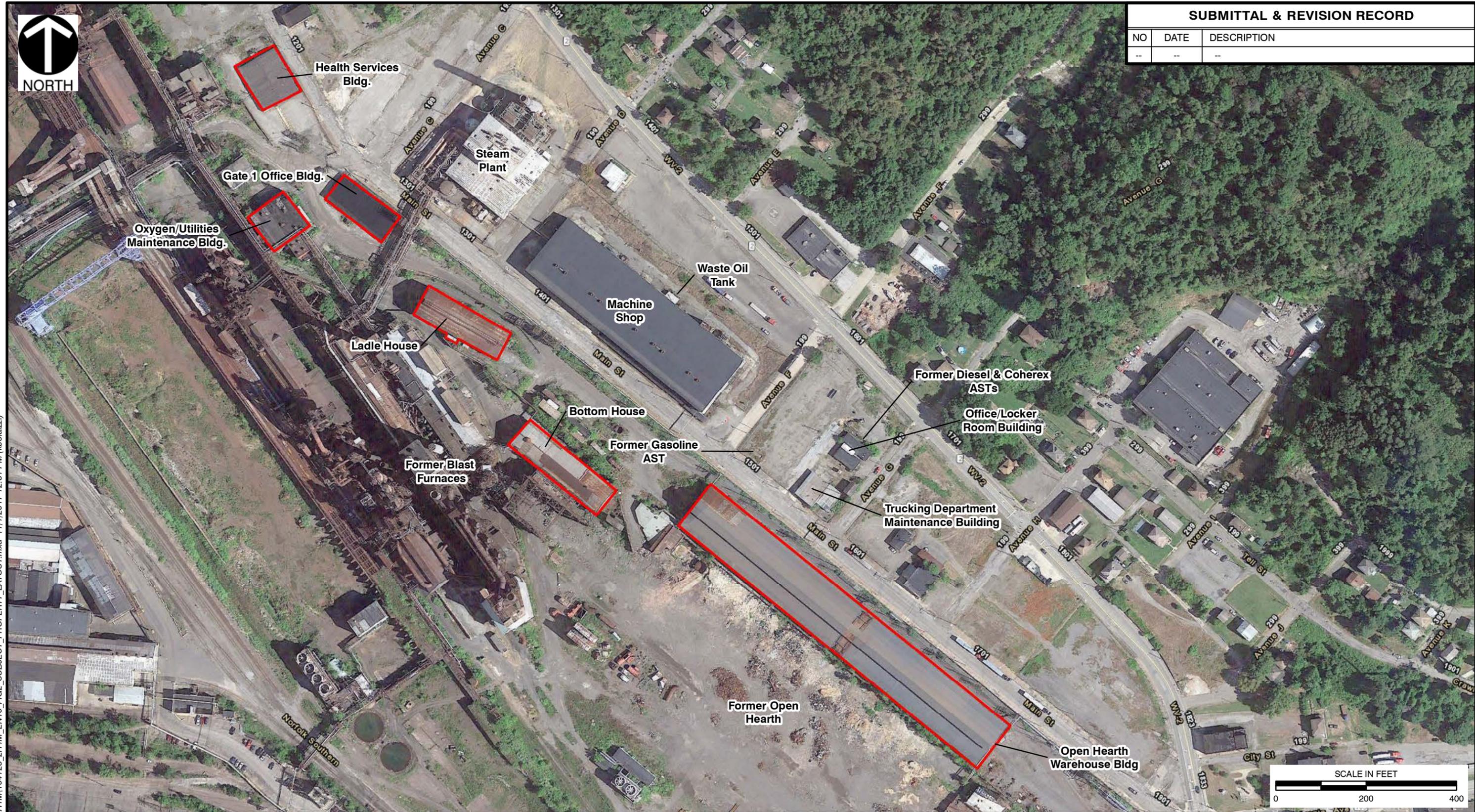
Given the short duration and permanent nature of the project, the effects of climate change will not be a factor.

DRAFT

FIGURE



SUBMITTAL & REVISION RECORD		
NO	DATE	DESCRIPTION
--	--	--



LEGEND
 APPROXIMATE SUBJECT PROPERTY

REFERENCE
 1. AERIAL PHOTOGRAPHY COPYRIGHT
 GOOGLE EARTH PRO, EXPORTED 02/16/2017
 IMAGERY DATE 08/21/2015.

Civil & Environmental Consultants, Inc.
 4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
 www.cecinc.com

BUSINESS DEVELOPMENT CORPORATION OF
 THE NORTHERN PANHANDLE
 WEIRTON NORTH PROPERTY
 WEIRTON, HANCOCK COUNTY, WEST VIRGINIA

SUBJECT PROPERTY LAYOUT MAP

DRAWN BY:	KMC	CHECKED BY:	EAS	APPROVED BY:	DRAFT*	FIGURE NO:	2
DATE:	11/01/2017	SCALE:	1" = 200'	PROJECT NO:	164-123.2H1M	* Hand signature on file	

P:\2016\164-123-GIS\Map\EN10_2H1M_EN10_FIG2_SUBJECT_PROPERTY_LAYOUT.mxd 11/1/2017 12:31 PM (kcoleizl)

APPENDIX A
EXCERPT FROM ASBESTOS SURVEY REPORT



MINGO JUNCTION STEEL WORKS
NORTH END BUILDINGS
OPEN HEARTH WAREHOUSE
WEIRTON, WEST VIRGINIA
(HANCOCK COUNTY)



ASBESTOS SURVEY REPORT

MID ATLANTIC JOB NUMBER: CEC-17-21

OCTOBER 2017

PREPARED FOR:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE
SUITE 200
EXPORT, PA 15632

PREPARED BY:

MID ATLANTIC ENVIRONMENTAL CONSULTANTS, INC.
5320 N. PIONEER ROAD
GIBSONIA, PA 15044
(724) 444-3460 – OFFICE
(724) 444-3463 – FAX

midatlantic@zoominternet.net – EMAIL



5320 North Pioneer Road
Gibsonia, PA 15044
Phone: 724-444-3460
Fax: 724-444-3463
Email: midatlantic@zoominternet.net

November 2, 2017

Civil & Environmental Consultants
4000 Triangle Lane
Suite 200
Export, PA 15632

Attn: Mr. Dave Olson

Re: Summary of Asbestos Building Survey – Open Hearth Warehouse Building

To Whom It May Concern:

On Friday, October 20th, 2017, Mid Atlantic Environmental Consultants, Inc. mobilized and implemented an asbestos demolition survey of the Former Open Hearth Warehouse Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia. The purpose of this survey was to identify any asbestos containing building materials that may impact the potential future demolition of the building. All visible and accessible suspect asbestos containing building materials were retrieved and analyzed by Polarized Light Microscopy (PLM) with dispersion staining techniques. An asbestos inspection report indicating the results of the survey is enclosed. Mr. Edgar King, an EPA / West Virginia Certified Asbestos Inspector, conducted all survey work. This survey and report are for informational purposes only and are based on the best available information at the time of the survey. The information is intended to provide a basis to solicit bids and develop a plan for abatement work. Additional ACMs may be present which are not able to be identified during the survey. Once abatement and / or demolition activities begin and areas are exposed, additional ACMs may be discovered. A change in the scope of services to identify and categorize additional ACMs may be required.

We appreciate the opportunity to assist Civil & Environmental Consultants, Inc. with this project and look forward to assisting you on future assignments. Should you have any further questions or concerns do not hesitate to contact us at (724) 444-3460 or by e-mail at midatlantic@zoominternet.net.

Sincerely,

A handwritten signature in blue ink that reads 'Edgar J. King'.

Edgar J. King
Asbestos Building Inspector
WV License # AI009156

A handwritten signature in blue ink that reads 'Timothy E. Daniels'.

Timothy E. Daniels
Managing Partner
WV License #: AD003952

North End Buildings - Former Open Hearth Warehouse Building

Mid Atlantic Environmental Consultants, Inc. (MAEC) was retained by Civil & Environmental Consultants, Inc. to conduct an asbestos demolition survey at the Former Open Hearth Warehouse Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia (Hancock County). Mid Atlantic representative Mr. Edgar King, accompanied by Mr. Dennis Smith, performed the visual inspection and collection of suspect asbestos containing building materials. Mr. King is an EPA / West Virginia Certified Asbestos Inspector (License #: AI009156).

At the time of Mid Atlantic's on-site investigation / asbestos survey, the Former Open Hearth Warehouse Building was un-occupied and in poor condition. The building has been vacant for a number of years and some delamination of the existing building structure has occurred. MAEC's survey team, to the best of their ability, performed this asbestos survey for due diligence purposes given the existing conditions of the building. The purpose of this survey was to identify any suspect asbestos containing building materials that may impact planned future demolition of the building. There was no access to the rooftop at the time of this survey although it appeared to be the same rusted out older and replaced newer metal as the rest of the building.

Bulk samples of suspect asbestos containing building materials were collected throughout the building. A total of six (6) samples, (12) including splits were collected at this time. Of those samples, six (6) were identified as being ACM. An asbestos containing material is defined as any material containing greater than one percent (>1%) asbestos. For a summary of all identified ACM, refer to Table 1—Asbestos Containing Materials. The complete listing of materials sampled is indicated in Appendix A—Building Inspection Results. Refer to Appendix B- for Sample Location Diagram.

TABLE 1—ASBESTOS CONTAINING MATERIALS

MATERIAL	LOCATION	APPROX. QUANTITY	FRIABLE / NON-FRIABLE	ASBESTOS CONTENT
Black Tar Paper	Open Hearth Warehouse Building North End & West Side	900 Ln Ft	Non-Friable	55 % Chrysotile
Grey / Brown Aircell Insulation	Open Hearth Warehouse Building North End & West Side	900 Ln Ft	Friable	60 % Chrysotile

AmeriSci Laboratories of Richmond, Virginia analyzed the bulk samples by Polarized Light Microscopy (PLM) methods. PLM analysis utilizes dispersion staining techniques as described by the Environmental Protection Agency (EPA) Method 600/M4-82-020. Refer to Appendix C for laboratory analysis results.

All asbestos abatement work should be conducted by a licensed asbestos abatement contractor prior to implementing any demolition activity procedures. Prior to the initiation of any asbestos abatement work, ensure that all of the delegated state and local pollution control agencies in the area and / or the EPA regional office are notified.

North End Buildings - Former Open Hearth Warehouse Building

Refer to appendices for further information.

Appendix A—Building Inspection Results

Appendix B—Sample Location Diagram

Appendix C—Laboratory Analysis Results

Appendix D—Accreditation

Should you have any further questions, feel free to contact our office at (724) 444-3460.

DISCLAIMER

DATE OF ISSUE— November 2, 2017

This asbestos survey report was prepared by Mid Atlantic Environmental Consultants, Inc. The purpose of this survey is to provide general information for the potential upcoming demolition project related to the Former Open Hearth Warehouse Building located at the Mingo Junction Steel Facility (North End Buildings) in Weirton, West Virginia regarding the presence of accessible and / or exposed building materials (including the rooftop) that commonly contain asbestos. There is the distinct possibility that conditions exist which could not be identified within the scope of the study or which were not apparent during the site visit. Unexposed and / or physically inaccessible areas are not warranted in regards to this specific asbestos survey. No warranties expressed or implied are made by Mid Atlantic or its employees, as to the use of any information, apparatus, product or process, disclosed in this report. If project bidding is to be performed in regards to asbestos abatement, it is recommended that all potential abatement contractors re-quantify all given quantities provided in this report. All given quantities of building materials are approximations only. This report is provided for the sole purpose of identifying visible / accessible asbestos containing building materials as outlined herein.

Appendix A – Building Inspection Results

Mid Atlantic Environmental Consultants, Inc.
 5320 N. Pioneer Road
 Gibsonia, PA 15044
 (724) 444-3460 Phone (724) 444-3463 Fax
 Email: midatlantic@zoominternet.net

Building Inspection Results

Client: Civil & Environmental Consultants, Inc. Date: October 20, 2017
 Project: Mingo Junction Steel Works – North End Buildings Inspector: Edgar King
 Open Hearth Warehouse – Weirton, West Virginia EPA / West Virginia Lic. No: AI009156
 Job Number: CEC-17-21

SAMPLE	LOCATION	DESCRIPTION	APPROX QUANTITY	CONDITION	POTENTIAL FOR DAMAGE	ASBESTOS CONTENT
01	Open Hearth Warehouse Building East Side 8" Pipe Metal Rack Coated Potable Water	Yellow / Beige / Silver TSI Fiberglass	850 Ln Ft (A)	Fair	High	None
02	Open Hearth Warehouse Building East Side 8" Pipe Metal Rack Coated Potable Water	Yellow / Beige / Silver TSI Fiberglass	(A)	Fair	High	None
03	Open Hearth Warehouse Building East Side 8" Pipe Metal Rack Coated Potable Water	Yellow / Beige / Silver TSI Fiberglass	(A)	Fair	High	None
04A	Open Hearth Warehouse Building North End & West Side	Black Tar Paper	900 Ln Ft (B)	Poor	High	55 %
04B	Open Hearth Warehouse Building North End & West Side	Brown / Black Insulation	(B)	Poor	High	None
04C	Open Hearth Warehouse Building North End & West Side	Grey / Brown Aircell Insulation	(B)	Poor	High	60 %
05A	Open Hearth Warehouse Building North End & West Side	Black Tar Paper	(B)	Poor	High	55 %
05B	Open Hearth Warehouse Building North End & West Side	Brown / Black Insulation	(B)	Poor	High	None
05C	Open Hearth Warehouse Building North End & West Side	Grey / Brown Aircell Insulation	(B)	Poor	High	60 %
06A	Open Hearth Warehouse Building North End & West Side	Black Tar Paper	(B)	Poor	High	55 %
06B	Open Hearth Warehouse Building North End & West Side	Brown / Black Insulation	(B)	Poor	High	None
06C	Open Hearth Warehouse Building North End & West Side	Grey / Brown Aircell Insulation	(B)	Poor	High	60 %

Please be advised that the letter / symbol under the approximate quantities column denotes approximate duplicate quantities through-out this survey for that particular material.

ASBESTOS INSPECTION QUESTIONNAIRE

DATE of inspection: 10-19-17 INSPECTOR: Edgar KMS

CLIENT: CEL

LOCATION: Mingo Junction steel north End Bldgs (open Hearth Bldg)

ADDRESS: Weirton W.V.

COUNTY: Hancock

Please circle one—

Purpose of survey: Demolition Renovation Real estate transaction Other
If other, explain _____

This survey is Complete Limited
If limited, explain No Roof Access, looked like only rusty metal

The building is currently Occupied Unoccupied

The general condition of the building is Good Fair Poor

Number of buildings included in the survey 1

Number of floors in the building 1

Main exterior building component (i.e. yellow brick, concrete block, etc...) metal siding

Please answer yes or no.

Was the basement included? NA Was the attic included? Y/N

Was the roof included? NOT Accessed Is a map included? _____

Were any areas inaccessible? yes If yes, explain Roof Too high

Were you accompanied by anyone yes If yes, who Dennis Smith

Were any commonly found materials, not present? (Floor tile, plaster, window caulking, etc...)? yes If yes, list and explain All of Above

Any other important / relevant observations:

Appendix B – Sample Location Diagram

Mingo Junction Steel
Open Hearth Building 06

05

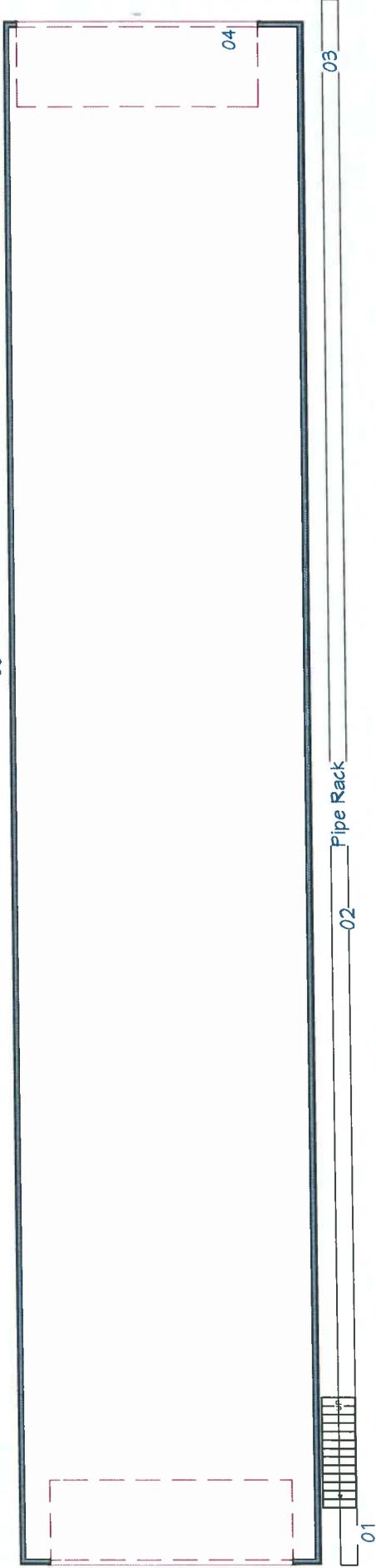
04

03

02 Pipe Rack

01

01



Appendix C – Laboratory Analysis Results



5320 N. Pioneer Road
 Gibsonsia, PA 15044
 Phone: 724-444-3460 Fax: 724-444-3463

117101966

Chain of Custody Form

SAMPLE	LAB ID NUMBER	TYPE OF ANALYSIS	TURNAROUND TIME
01		PLM Asbestos	Standard
06			

Project Site: Mingo Junction Northend Bldgs visit on Sampler Signature: [Signature] JN# CEC-17-21
after health upgrade

Client / Address: CEL Phone: _____ Fax: _____

Relinquished By: Edgar King Date: 10-20-17 Time: 0854

Relinquished By: [Signature] Date: 10/23/17 Time: 930am

Received By (AmeriSci) _____ Date: _____ Time: _____

Additional Information:

- Please indicate Mid Atlantic's job # on all results and invoices
- Email results to midatlantic@zoominternet.net

RECEIVED
 OCT 24 2017
 By [Signature]



Please Reply To:

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

FACSIMILE TELECOPY TRANSMISSION

To: Tim Daniels Mid Atlantic Environmental Consultants, Inc	From: John S. Shearwood
Fax #:	AmeriSci Job #: 117101966
Email: MIDATLANTIC@ZOOMINTERNET.NET	Subject: PLM 5 day Results
	Client Project: CEC-17-21; CEC; Mingo Junction Northend Bldgs Weirton Open Hearth Warehouse

Date: Saturday, October 28, 2017
Time: 12:52:07

Number of Pages: 6
(including cover sheet)

Comments:



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AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Mid Atlantic Environmental Consultants, **Date Received** 10/24/17 **AmeriSci Job #** 117101966
Attn: Tim Daniels **Date Examined** 10/28/17 **P.O. #**
5320 North Pioneer Road **Page** 1 of 3
Gibsonia, PA 15044 **RE: CEC-17-21; CEC; Mingo Junction Northend Bldgs Weirton
Open Hearth Warehouse**

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
01	117101966-01	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe Metal Side Rack Coated Portable Water			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Yellow/Beige/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			
02	117101966-02	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe Metal Side Rack Coated Portable Water			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Yellow/Beige/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			
03	117101966-03	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe Metal Side Rack Coated Portable Water			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Yellow/Beige/Silver, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 2 %, Fibrous glass 90 %, Non-fibrous 8 %			
04	117101966-04L1	Yes	55 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Fibrous, Tar Paper			
Asbestos Types: Chrysotile 55.0 %			
Other Material: Non-fibrous 45 %			
04	117101966-04L2	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Brown/Black, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Cellulose 10 %			

See Reporting notes on last page

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Northend Bldgs Weirton
Open Hearth Warehouse

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
04	117101966-04L3	Yes	60 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Gray/Brown, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 60.0 %			
Other Material: Non-fibrous 40 %			
05	117101966-05L1	Yes	55 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Fibrous, Tar Paper			
Asbestos Types: Chrysotile 55.0 %			
Other Material: Non-fibrous 45 %			
05	117101966-05L2	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Brown/Black, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Cellulose 10 %			
05	117101966-05L3	Yes	60 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Gray/Brown, Heterogeneous, Fibrous, Insulation			
Asbestos Types: Chrysotile 60.0 %			
Other Material: Non-fibrous 40 %			
06	117101966-06L1	Yes	55 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Black, Heterogeneous, Fibrous, Tar Paper			
Asbestos Types: Chrysotile 55.0 %			
Other Material: Non-fibrous 45 %			
06	117101966-06L2	No	NAD
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Brown/Black, Heterogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Animal hair 90 %, Cellulose 10 %			

Client Name: Mid Atlantic Environmental Consultants, Inc

PLM Bulk Asbestos Report

CEC-17-21; CEC; Mingo Junction Northend Bldgs Weirton
Open Hearth Warehouse

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
06	117101966-06L3	Yes	60 %
Location: Open Hearth Warehouse Bldg 8" East Pipe North End And West Side			(by CVES) by John S. Shearwood on 10/28/17
Analyst Description: Gray/Brown, Heterogeneous, Fibrous, Insulation Asbestos Types: Chrysotile 60.0 % Other Material: Non-fibrous 40 %			

Reporting Notes:

Analyzed by: John S. Shearwood John S. Shearwood Date: 10/28/2017 Reviewed by: John S. Shearwood

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Appendix D – Accreditation



WEST VIRGINIA

Asbestos Program

Edgar J. King

IS LICENSED AS AN
ASBESTOS INSPECTOR

License # AI009156

Issued: 3/13/2017

Expires: 3/31/2018

Walter M. King

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Timothy E. Daniels

IS LICENSED AS AN
**ASBESTOS PROJECT
DESIGNER**

License # AD003952

Issued: 10/10/2017

Expires: 10/31/2018

Walter M. Dwyer

Director
WV OEHS

WEST VIRGINIA

Asbestos Program

Mid-Atlantic Environmental
Consultants, Inc.

IS LICENSED AS AN
ASBESTOS LABORATORY -
AIR AND BULK



License # LT000563

Issued: 5/31/2017

Expires: 5/31/2018

Director
WV OEHS

William M. Dray

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division

This is to certify that

Mid-Atlantic Environmental Consultants

**5320 N. Pioneer Road
Gibsonia, PA 15044**

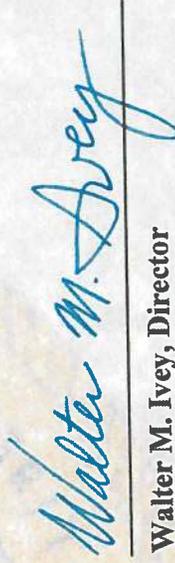
Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number:

LT000563

Issued: 5/31/2017

Expires: 5/31/2018



**Walter M. Ivey, Director
Office of Environmental Health Services**

APPENDIX B
CONTRACTOR COST ESTIMATES
