Carla Brown

From: Carla Brown

Sent: Tuesday, July 26, 2022 2:36 PM

To: Yolanda Adams (adams.yolanda@epa.gov)

Cc: Krystal Rudolph; Jaricus Whitlock

Subject: Proposed Halter Marine and Offshore, Inc. Title V Operating Permit (No. 1280-00118) **Attachments:** Response to Comments with Addendum and Comments.pdf; 1280-00118 Information

Relative_2022-02-25.pdf; 1280-00118 Draft TV Renewal Permit for PN_2022-02-25.pdf

Yolanda,

Attached is the proposed Title V Operating Permit for Halter Marine and Offshore, Inc., as well as the Information Relative to the permit and a revised Response to Comments (RTC) document. Please note that the Response to Comments was revised to add an addendum to address those comments from Ms. Crosslin which you forwarded to DEQ. The proposed permit and Information Relative were not revised as a result of the comments received. If amenable, we would like to consider today Day 1 of EPA's 45-day review period for the proposed permit.

Thanks, Carla

Carla Brown, P.E.

Air Program Manager Environmental Permits Division Mississippi Department of Environmental Quality 515 East Amite Street, Jackson, MS 39201 PO Box 2261, Jackson, MS 39225 601.961.5561



RESPONSE TO COMMENTS

Facility: Halter Marine and Offshore, Inc.

Address: 601 Bayou Casotte Parkway, Pascagoula, MS

Permit Action: Renewal of the Air Title V Permit

Permit No.: 1280-00118 Agency Interest No.: 6653

Date: May 20, 2022

The Mississippi Department of Environmental Quality (MDEQ) provided notice of a 30-day public comment period starting March 9, 2022 and ending April 8, 2022 for the renewal of the Title V Permit for Halter Marine and Offshore, Inc. (HMO). The week prior to the start of the public comment period, MDEQ's Office of Community Engagement sent a notice of the opportunity to comment to over 200 addresses in Pascagoula, including residents of the Cherokee neighborhood, the City of Pascagoula, and the Jackson County Board of Supervisors. One request for a public hearing in order to receive additional time to review the draft permit and submit comments was received via email on March 28, 2022 from Jennifer Crosslin, submitted on behalf of Barbara Weckesser, president of the Cherokee Concerned Citizens, a non-profit corporation registered in Mississippi.

As a result of the request, MDEQ decided to extend the public comment period by two weeks to April 22, 2022, and wait to see if additional significant comments were received before deciding to conduct a public hearing. Since no additional requests for a hearing were received and the only comments received were from Mrs. Weckesser which did not address issues relevant to the permit under review, MDEQ decided not to hold a public hearing on this permit action given the number of comments receive from the public and the additional time and expense which would be incurred by the State. Instead, the comments submitted are addressed herein.

The following pages contains a summary of the written comments received during the public comment period, as well as MDEQ's responses. Depending on the length of the comments, the comments may be summarized. Also, where comments lacked clarity, MDEQ made assumptions as to the intent of the comment.

Written correspondence was received from the following:

• Ms. Barbara Weckesser, via email received on April 19, 2022, with separate submittal via mail received on April 19, 2022.

Appendix A includes a copy of the written comments.

6653 PER20170002 Page 1 of 5



Comments from Ms. Weckesser

Comment #1: There is confusion relating to ownership and responsibility regarding VT Halter Marine, ST Engineering Halter Marine and Offshore, and Halter Marine and Offshore. This causes confusion when trying to report a complaint and in subsequent investigation of the complaint. Industry should clearly mark their property line.

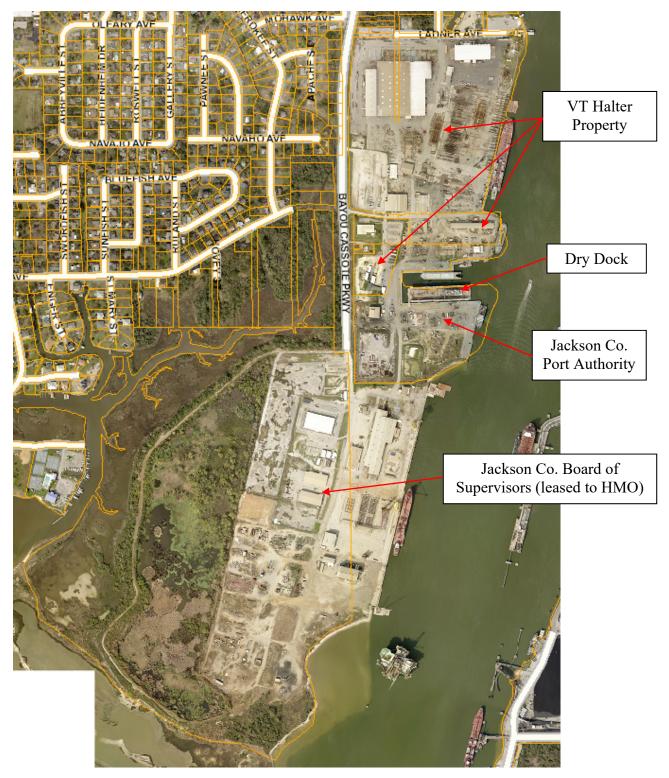
Response #1: MDEQ permitting staff coordinated with our Legal Division to determine whether VT Halter Marine, Inc. and Halter Marine and Offshore, Inc. should be considered a single source for permitting purposes. As explained in the Information Relative to the Title V Operating Permit under the "Single Source Determination" heading, these two facilities are independent legal and operational entities, such that one cannot exert control over the other. The Halter Marine and Offshore, Inc. facility was previously referred to as ST Engineering Halter Marine and Offshore, Inc., which incorporates the parent company (ST Engineering) in the name. However, the State of Mississippi does not allow a business to use "Engineering" in their registered name if they do not employ professional engineers performing services under the purview of the MS Board of Licensure for Professional Engineers and Surveyors. Therefore, for purposes of registering with the State, "ST Engineering" was removed from the registered name. MDEQ issues permits to the business entity registered with the MS Secretary of State; therefore, the permitted entity is currently Halter Marine and Offshore, Inc.

A property map depicting land ownership is provided below. Also, HMO may lease VT Halter Marine's dry dock, which is noted in the following map. Regarding inspections, the MDEQ staff at the South Regional Office (SRO) have contacts for the environmental managers at both VT Halter and HMO. Therefore, they can readily speak to someone to determine who is responsible for any observed issues. MDEQ does not have authority to require signage to delineate property boundaries, though we understand that VT Halter has completely fenced off their site, with exception of the eastern side along Bayou Casotte, and imposed additional security measures as required to conduct business for the U.S. Department of Defense.

6653 PER20170002 Page 2 of 5



Jackson Co. Tax Parcels (https://webmap.co.jackson.ms.us/)



6653 PER20170002 Page 3 of 5



Comment #2: Ms. Weckesser requests monitoring of volatile organic compounds (VOCs) and particulate matter (PM) in the neighborhood.

Response #2: EPA established National Ambient Air Quality Standards (NAAQS) for PM_{2.5} and PM₁₀, which are deemed protective of public health and welfare and take into consideration sensitive populations. MDEQ operates an air quality monitor in Pascagoula to measure PM_{2.5}, which continues to demonstrate compliance with the NAAQS. In 2021, the annual average design value for PM_{2.5} at the Pascagoula monitor was 8.4 μ g/m³, lower than the 12.0 μ g/m³ NAAQS. The 24-hr design value for 2021 was 18 μ g/m³, well below the 35 μ g/m³ NAAQS.

MDEQ does not have authority to require HMO to monitor air quality in the Cherokee neighborhood. However, MDEQ recently applied for a grant from the U.S. Environmental Protection Agency (EPA) to conduct one year of monitoring in the Cherokee community for PM₁₀, VOC, methane, and reduced sulfur compounds. MDEQ expects to be notified by EPA regarding award of this grant in the fall of 2022. Should MDEQ be awarded the grant, the goal is to collect sufficient data to evaluate whether measured concentrations indicate the presence of an air quality problem that could impact human health in the Cherokee community.

Comment #3: Rigs pulled in for repair or rework should be inspected for toxic chemicals on them before any work begins.

Response #3: After further discussion with HMO regarding this comment, the oil rigs do not contain any cargo or oil drilling or production products or waste. They may have some fuel onboard that is removed prior to doing repair work on them for safety reasons. The fuel would be drained and stored in frac tanks at HMO on a temporary basis.

Comment #4: Enforcement of the permit should be first and foremost and should not allow for self-reporting.

Response #4: MDEQ's Environmental Compliance and Enforcement Division (ECED) staff review all air reports submitted by HMO, including the semiannual reports and annual certification of compliance reports, as well as any additional performance testing or submittals that may be required by the permit. MDEQ also conducts a site inspection, which includes an onsite records review, to visually verify compliance with the provisions of the permit. Additional inspections may also be conducted by MDEQ staff in the South Regional Office (SRO), who investigate complaints in the area.

Self-monitoring and self-reporting are generally the bulwark of all state and federal environmental regulations because the regulatory agencies do not have the resources or funding to maintain staff at every regulated facility. Information used to demonstrate compliance with a permit may come from a third party, such as Safety Data Sheets, material specifications/content, emissions tests, and other laboratory analyses. However, this information is typically used in conjunction with monitoring and recordkeeping the facility maintains, such as type and amounts of materials used,

6653 PER20170002 Page 4 of 5



hours of operation, operating parameters, and inspection and maintenance logs to demonstrate compliance with the emission limits and work practice standards in the permit.

Comment #5: The complaint related to sand blasting coming off of HMO property was not resolved.

Response #5: On October 9, 2020, Ms. Weckesser called the SRO with a complaint regarding sandblasting dust leaving the site. The SRO visually verified the complaint the same morning it was reported and spoke to VT Halter's environmental manager. He indicated the dust was coming from the dry dock, which HMO was using. The SRO then met with the environmental manager at HMO the same morning to discuss the issue. HMO was blasting without the use of blast curtains and ceased blasting. They switched from a dry blast to a wet blast before restarting to minimize dust. That day the winds were also gusting over 20 mph with Hurricane Delta making landfall in Louisiana. Per the Site Dust Control Plan included in the proposed permit, blasting at the dock must be contained; therefore, the proposed permit would prevent such conditions in the future or otherwise result in a potential enforcement action.

Comment #6: There is general concern about the health of those living in the neighborhood and how pollution from industry may be contributing to that, as well as concerns with odors and dust.

Response #6: Based on the nature of the HMO operations, MDEQ believes the operations should generally not produce odors that are noticeable off-site. Odors from HMO operations may be produced from paint and solvent use or welding but should dissipate quickly on-site. Given that HMO conducts blasting outside and on elevated structures, there is potential for dust to leave the site if blasting operations are not managed well. Therefore, the permit includes a Site Dust Control Plan as Appendix C to the permit. MDEQ can enforce this plan and request changes to the plan should implementation of the plan not adequately prevent dust from leaving the site.

As noted in Response #2, MDEQ hopes to conduct air quality monitoring in the neighborhood to help aid in determining whether air quality problems exist in the area.

6653 PER20170002 Page 5 of 5



ADDENDUM TO THE RESPONSE TO COMMENTS DOCUMENT DATED MAY 20, 2022

On June 24, 2022, Yolanda Adams of EPA Region 4 forwarded an email from Jennifer Crosslin (citizensbuyout@gmail.com), of Cherokee Concerned Citizens, to Carla Brown, of MDEQ, to determine whether MDEQ had received and responded Ms. Crosslin's comments. The comments were provided as a PDF attached to the email. The email was sent on the last day of the public comment period, April 22, 2022. Upon further investigation and confirmation from MDEQ's Office of Information Technology, MDEQ determined that the email and attached comments were not received by Carla Brown, and MDEQ was not otherwise aware of the attempt to submit these comments.

In an effort to ensure Ms. Crosslin's comments were addressed, MDEQ has prepared this addendum to support the initial Response to Comments (RTC) document. The comments are summarized below followed by MDEQ's responses. The full comments and related attachments are included as Appendix B to the RTC document.

Jennifer Crosslin Comment: The signature of Lim Nian Hua for the Responsible Official is missing in the permit application.

MDEQ Response: The PDF of the application provided as a courtesy to the public by MDEQ on our website was an electronic version provided directly from the consultant, rather than a scanned version of the original hard copy submitted to our office. Therefore, Section A.13 containing the certification by the Responsible Official was not present. However, MDEQ confirmed that the original hard copy of the application contained in our Administrative Record has a signed certification from Lim Nian Hua, dated February 14, 2020. For further information regarding the separate source determination for Halter Marine and Offshore, Inc. and VT Halter Marine, Inc. please refer to Response #1 in the initial RTC document.

Jennifer Crosslin Comment: MDEQ should require continuous community air monitoring for VOC and PM to ensure compliance with 11 Miss. Admin. Code Pt. 2, R. 1.3.C.

- a) We submitted signatures of 30 residents all affirming that they are still getting "dust" on their property to MDEQ as part of our public comments for VT Halter's permit. Because we cannot differentiate between the two companies, VT Halter and Halter Marine Offshore, we submit the signatures again as evidence that one or both facilities are violating the above requirement. It should not be a requirement that this evidence also have been reported to MDEQ reporting system as implied by the agency's response when submitted as part of VT Halter's permit.
- b) Determination for injury to humans living near these industries requires local community air monitoring. As explained to us by the Agency for Toxic Disease Registry (ATSDR), continuous local community air monitoring is the best way to make any determination of health impacts of industrial pollution. The opacity tests and product and usage monitoring and reporting requirements fail to make this determination. Additionally, the VOC test that MDEQ often offers up as evidence that facilities are not in violation is inconclusive at best.

- c) We also submit the health study conducted in partnership with Dr. Wilma Subra that supports the community's assertion that industrial activity is in fact threatening the health of nearby residents.
- d) Attached is a photo taken on Industrial Park Road on April 9th, 2022 after 5:00 pm that shows a cloud of fugitive emissions that may be coming from Halter Marine Offshore. If you zoom in where the cranes, you should be able to see the cloud that the person taking the photo could see with their eyes. We have also attached three other photos that illustrate the pollution in the area. One photo taken on March 17th from a resident that lives on Seminole in Cherokee subdivision. The entire sky is not in full view of the photo but if it were you would see that it is clear only one dark cloud. These clouds are commonly see in the neighborhood. The other two photos are images taken on April 9th. You can see a ring of dark clouds in the sky. Luckily, the wind was blowing the opposite direction of the neighborhood. The two pictures demonstrate, however, that the source of the dark clouds is actually pollution surrounding all the nearby facilities.
- e) We also submit the following analysis of five wipe samples taken at five different locations in Cherokee subdivision on April 9th, 2022. All five samples detected 22 out of 22 heavy metals and the ratios were relatively consistent across all five locations, showing similar levels of calcium, iron, magnesium, zinc, and aluminum. They are also consistent with a dust wipe sample taken in 2016 (also attached). Elevated levels of aluminum, calcium, iron, and magnesium have also been reported in the soil. (see attached soil sample by MS State Lab)

MDEQ Response: MDEQ acknowledges the information and attachments submitted related to the comments above and believes the information does not alter or require further revisions to the permit conditions proposed in the Title V Operating Permit for Halter Marine and Offshore (HMO) for the following reasons:

- a) The proposed Title V Operating Permit contains a Site Dust Control Plan attached as Appendix C to address best management practices for minimizing the potential for dust to leave the site. Since the plan is part of the permit, it provides MDEQ a more clear mechanism for enforcing the General Nuisance provision cited.
- b) Response #2 of the initial RTC document addresses this concern regarding more continuous air monitoring in the community.
- c) Because of the toxicological expertise needed to draw conclusions regarding if there are exposure pathways, what the nature of the exposure is, and what the potential health impacts may be, the Agency for Toxic Substances and Disease Registry (ATSDR) is the appropriate agency to make such determinations. Therefore, we believe Response #2 of the initial RTC document best addresses this concern.
- d) MDEQ cannot discern where the noted dark clouds are coming from in the April 9, 2022 photos provided, as they do not appear distinct to any source at HMO or appear to be from a specific point source of emissions elsewhere within the view of the picture.
- e) MDEQ does not have enough information regarding the wipe samples (how and where they were collected, weight of the wipe, or surface area wiped) to draw any sound

Addendum to the Response to Comments Halter Marine and Offshore, Inc. Title V Operating Permit

conclusions. The constituents sampled are not all heavy metals and are often naturally occurring in soils and necessary for plant growth, including calcium and magnesium. Aluminum and iron are the two must abundant metals in the earth's crust and are, therefore, expected to be present at levels higher than other metals in soils. Zinc is present in soils and is also used in many commercial products, including paints, rubber, cosmetics, electrical equipment, and steel products.

Jennifer Crosslin Comment: MDEQ should also require Halter Marine Offshore to build a sandblasting facility like that required of VT Halter.

MDEQ Response: Because Halter Marine and Offshore performs repair work on an entire vessel or oil platform, sandblasting operations for such work cannot reasonably be contained within a building. The Title V Operating Permit addresses one building equipped with a baghouse for control of particulate matter, which houses a Wheel-a-brator for abrasive blasting of steel plates that may subsequently be used in the repair of a vessel or rig. Also, VT Halter was required to build a Blasting and Painting Building to house blasting and painting operations as a result of an Agreed Order addressing alleged violations of the General Nuisance provision of 11 Miss. Admin. Code Pt. 2, R. 1.3.C.

APPENDIX A

Comments from Ms. Weckesser

Carla Brown

From: Barbara Weckesser <disneygirlbarb@att.net>

Sent: Tuesday, April 19, 2022 10:23 AM

To: Carla Brown

Subject: Permit Halter Marine and Offshore Inc.

This Message Is From an External Sender

This message came from outside your organization.

As a citizen of Pascagoula, MS and my neighborhood bordering this industry it is my request for this permit that monitoring be placed in our neighborhood to record the Voc's and Particle Matter coming into our neighborhood. Independent contractor report to the citizens in this neighborhood monthly in written form.

Rigs pulled in to repair or rework be inspected for toxic chemicals on them before any work begins.

Industry to clearly mark their property line. There are several Halter, VT Halter, Halter Marine Offshore Inc, and ST Engineering that all seem to joined with no mark of where one ends the other begins. This becomes a problem when MDEQ comes to investigate a complaint.

This neighborhood has been here for over 60 years. With the increase in industry pollution we have noticed and proven through health surveys the affects on our health. Over 20 citizens have been in the last 5 years none from covid. There is only 111 houses. Cancer, heart disease, and lung problems. Both young and old.

Permit Board as you issue this permit I would hope you consider the residents as well as the industry. One of your own employees at MDEQ said he didn't see how we could live here.

A permit course was given to the citizens then no permit to work on for 6 years. Enforcement of a permit should be first and for most the way to do that is a monitoring system that records what is being released not a self reporting system.

As a citizen of this neighborhood I am concerned for my health as well as my neighbors. None of us are chemical engineers or science experts. What we do know is our cars and houses are covered in grit smell of chemicals over coming us burning eyes and nose. As a permit board I ask you look into the information you receive before you issue this permit

Sincerely, Barbara Weckesser Cherokee Concerned CITIZEN April 19, 2022 Mississippi Environmental Quality Permit Board PO Box 2261 Jackson, MS 39225 515 East Amite St Jackson, MS 39201

Permit Board Carla Brown

April 06,2022



MDEC

Trespass is my main issue with Halter Marine and Offshore Inc. This is what the notice states for the name. The name at one time recently said ST Engineering. It is hard to say where one starts and the other ends. Seems we have 3 or 4 companies using similar names until they get caught then it is one of the others doing the violation. Over the last 10 years I have watched this neighborhood suffer major health issues, deal with dust, smell, and noise on a daily basis.

I feel until the company/companies can maintain their VOCs Particle Matter and noise no permit should be renewed. Work should have to stop until they are in compliance with no trespass coming off property.

Oct.09,2020 I filed a complaint about sand blast coming off property thinking the property was VT Halter when Biloxi MDEQ showed up VT Halter said not us so ST Engineering said it was them now we are given another name to work on a permit, which did have their name ST Engineering on the building at address for this permit. Also as of April 2021 the report wasn't finished on the violation.

I have called many times on smell of chemicals to MDEQ Biloxi particle matter is being measured by Purple Air monitor. Trespass is real I am paying the price with my health , not being able to enjoy going outside , unable to garden, because of trespass coming into our neighborhood. When we gave comments on VT Halter permit neighbors signed that they were still dealing with all the issues as before. Permit Board considered it as a survey REALLY try living here.

It is time MDEQ looked at the amount of VOCs particle matter that is going into the air we are having to breathe. What good is a permit if it isn't enforced.

I am enclosing an odor log taken February 2022. Report from public lab with our stories plus a web site to look up how much of a cancer causing chemical we are taking in. Also enclosed a report taken when this was Signal property look back in the files of employees complaints MDEQ agent came investigated said nothing found then employee filed with EPA see the

Time for action from this permit board Investigate who are you really issuing a permit to.

Permit should not be issued until MDEQ investigates the trespass coming into our neighborhood and address our health issues from release of chemicals and particle matter above the allowed amount in current permit, without any action taken by MDEQ for these violations. Check the complaint file flash drive with evidence there.

Sincerely.

Barbara Weckesser.

Barbara Weckesser 1502 Cherokee ST Pascagoula, MS 39581

Description some state of chemical engineer funts human being living in a toxic survivorment from industry pollution.

Therefore I can't give you technial points on this permit just what I have to go through dailey living here.

Barbara Week esser.

Name: Barbara Wichos Address: 1502 cherokee

Odor Logs for the week of Feb, o 1, 2022

	2-11-22	211.2	2.010	26.2	3hm.	Wed 3.2.2	Wack Ji2-22	Day of Week
	2-11-22 afterwoon Spreed	2-11-2 Marines 2-11-22 5:50 AM	7.10. 2 Morning 6,25 An	262 Evening 5:20714	3/2 movins 2322 7:30 Am	Wed Jamos	goo Am	Time of Day ("Early Morning" or "Late Evening")
	Smell		Porce	oder ø	moise	od	odor4,	Activity (Noise or odor)
	ontside		Bath	ontaile	Heard Iroide Foud,	nois ostaid	tritarale	Location (Indoor/Outdoor or Both)
	Moderate	Severer puperari	Suler	Server.	Severe	moderati acidhulu	Moderate	Severity (Light, Moderate, Severe)
	Chemical		f	Chimical acid		acidhulu	acidrike	Odor Type (Describe both sense of smell and irritation)
		I got up this morning harding too be to	poh igten steep is it i forn their some brogs.	gos flesch		Low car we know always		Health Effects (Document any immediate or delayed health effects)
W. T. WEFFILL	Sold Swang 6 353	W calm. 100%.	of safe free for the construction of the const	is 52 per. 59 %.		150 15mm	Kain & Wind ESE 18	Weather Conditions (Include Wind, Precipitation, Temperature/Humidity, and Clouds)
1 34 30 F F F F	Broking sport	mighted ber myself beer puch all week forsh all week	Purple sein	Exorted person	Steel Focked	Des Byon	Called Shorting 3:58 AM who is what her area.	Comments (Visual or other observations)

pnwex

We've just launched our series on air toxics. This is the first part of the series, so Pascagoula isn't mentioned yet-I will be writing an entire story on Pascagoula, to be published later (hopefully this month). For now, here's what we have:

A national story, which details our findings and gives an overview of how these hotspots have come to be: https://www.propublica.org/article/toxmap-poison-in-the-air

TYPE IN MY ADDRESS. 1502 CHEROKEE

Our map, which provides the public with a searchable view of large sources of industrial air pollution based on modeled EPA data: https://projects.propublica.org/toxmap/ PASCAGOULA,

A plain-language explainer for readers who might be wondering what this analysis might mean for 395 &) them and how they should properly understand this data: https://www.propublica.org/article/can-airpollution-cause-cancer-risks

A place where people can send us tips about their experiences: https://www.propublica.org/tips/pollution/

And finally, a methodology, which explains how we built the map, discusses its limitations, and raises questions about some of the shortcomings in the underlying data: https://www.propublica.org/article/how-we-created-the-most-detailed-map-ever-of-cancercausing-industrial-air-pollution

In the coming weeks, my colleagues and I will be releasing further stories. I'm sure we'll talk again soon!

All best,

Lisa

We don't float in & out we live here. 24-7

100% is a little much to absorb.

Lisa Song

Reporter, ProPublica

646-712-0120

lisa.song@propublica.org

@lisalsong

#GivingNewsDay Double your donation and get a thank-you gift!

DONATE



Environment

They Knew Industrial Pollution Was Ruining the Neighborhood's Air. If Only Regulators Had Listened.

Raw throats, burning eyes, strong acid smells. Air monitoring that showed chemicals linked to leukemia. Barbara Weckesser and her neighbors told regulators that air pollution was making them sick. The law let them ignore her.



Barbara Weckesser stands in the doorway of her home in Pascagoula, Mississippi.

by <u>Lisa Song</u>, with additional reporting by <u>Ava Kofman</u>, photography by Kathleen Flynn, special to <u>ProPublica</u>

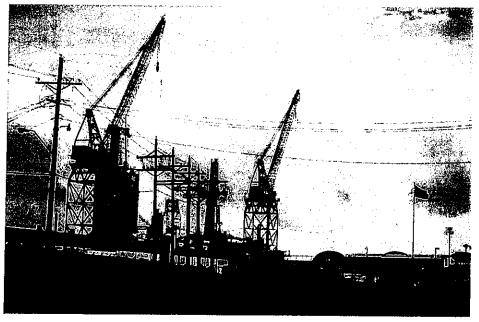
Nov. 29, 5 a.m. EST

ProPublica is a nonprofit newsroom that investigates abuses of power. Sign up to receive <u>our biggest stories</u> as soon as they're published.

The white ranch house in Pascagoula, Mississippi, was supposed to be Barbara Weckesser's retirement plan. In 2010, it was getting harder for the real estate agent and her husband to climb the stairs of their home on Dauphin Island, Alabama. She imagined a quiet existence of gardening and puttering around her porch. The Cherokee Forest subdivision seemed

like just the place to do it. Rabbits wandered the lawns among the dozens of modest homes built in the 1960s and '70s; families stayed put for decades. The ranch was a fixer-upper, so the couple tackled it together, installing drywall and hanging up new doors and cabinets.

Then came the dust. Weckesser, who was 64 at the time, first saw it after she left a window open one fall day in 2011 and black soot settled onto her new kitchen countertops. "I said, 'Holy hell, what in the world is this?'" She later found a grayish film on her black car. She knew it wasn't pollen because it felt gritty, like sand. Her first guess was that it was coming from VT Halter Marine, a shipbuilder located 800 feet away that was undergoing repairs to fix damage from Hurricane Katrina. The site later became the scene of constant painting, sandblasting and welding, as workers rushed to fulfill contracts with the Navy and Coast Guard.



VT Halter Marine, a shipbuilder in Pascagoula that holds contracts with the Navy and Coast Guard.

Months passed and the dust kept falling in Pascagoula — more than she had ever witnessed growing up near Kentucky's coal fields. Weckesser got headaches from chemical odors and wondered if it was safe to eat the tomatoes she'd planted. Fed up, she found a number for the Mississippi Department of Environmental Quality, the state agency charged with ensuring clean air. It had issued operating permits to the shipbuilder and a dozen other major industrial facilities nearby, including a huge Chevron oil refinery and a chemical plant. She wanted the regulators to find out where the noxious fumes were coming from.

When she called MDEQ in March 2012 about a "welding gas" smell that left a metallic taste in her mouth, it took four days for an inspector to drive by the shipyard. The inspector noted strong odors and a billowing yellowish-white cloud near Mississippi Phosphates, a local fertilizer manufacturer. The company told MDEQ that the cloud was probably steam. That was the extent of the investigation and Weckesser's first glimpse of a larger, frustrating reality.

Neither industrial polluters nor the regulators who govern them know

exactly how much hazardous air pollution is billowing out of smokestacks at any given time, nor the degree to which that pollution is finding its way into surrounding neighborhoods. The law doesn't require them to.

Back in 1990, when the Clean Air Act mandated how the Environmental Protection Agency would regulate industrial air pollution, monitoring methods were crude, expensive and limited. So the EPA allowed facilities to estimate their emissions of hazardous air pollutants, also called air toxics, like hexavalent chromium and ethylene oxide that can cause cancer, respiratory illnesses, heart problems and other ailments. The agency entrusted states to enforce these rules through air permits, which set limits on the amount of chemicals each facility could emit. Despite dramatic advances in technology, a lot of these permits still rely on self-reported estimates that are often outdated, incomplete or inaccurate. Only rarely do regulators check to see if what is reported matches reality.

"We built this whole regulatory system based on a lack of good data," said Adam Babich, a Tulane professor who specializes in environmental law. It "gets harder and harder to argue with a straight face that it's unreasonable to require extensive monitoring."

The EPA and state agencies could install air monitors in communities to gauge how much toxic pollution reaches neighborhoods. But there's no federal requirement to do that. ProPublica, in an <u>unprecedented analysis</u> of modeled EPA emissions data, identified more than 1,000 hot spots of toxic air pollution nationwide. Yet the EPA spends only \$5 million per year to run 26 monitoring stations across the country; it offered another \$5 million last year for state and local air monitoring grants and will use \$25 million from President Joe Biden's coronavirus stimulus package <u>to help communities</u> monitor for air pollutants of interest, including air toxics.

If a neighborhood is among the minority of hot spots to actually get a monitor installed, and if that monitor reveals that residents are, indeed, breathing in troubling levels of air toxics, the law doesn't require regulators to investigate to see whether nearby polluters are violating air permits.

"There's often no environmental cop on the beat," said Judith Enck, a former EPA administrator for the regional office that covers areas including New York and Puerto Rico. Every time she explains that reality to communities, she said, it's "kind of like telling people there's no Santa Claus."

In a statement, the EPA said it is working to improve its data on emissions of toxic air pollution, do more to communicate risks to the public, develop regulatory solutions and reduce pollution. "Too many communities have suffered disproportionately from air pollution and other environmental burdens for far too long," the agency said. "EPA recognizes the continued frustration experienced by residents living with increased health risks due to environmental pollution."

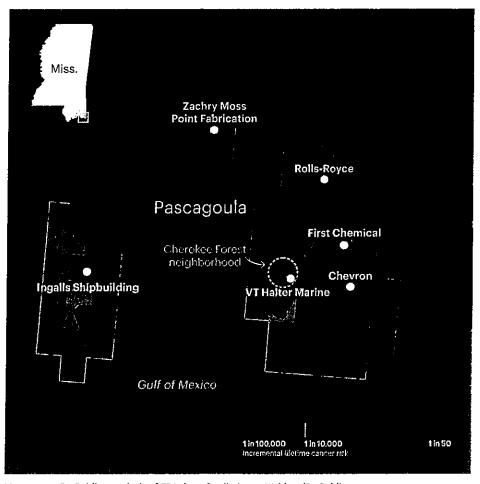
So far such residents have often been left to fend for themselves. Across the country at any given time, countless "kitchen table activists," as Enck calls them, toil in relative obscurity, struggling to get help from the

3 of 15

agencies that are supposed to protect them. To get the agencies' attention, they need to organize, hire lawyers and technical experts, collect evidence of the pollution's impact and drum up publicity. Regulators have a "tremendous amount of discretion" about how deeply they investigate citizen complaints, she added. "It's always interesting to see agencies respond when there's embarrassing stories in the media."

Weckesser didn't know what she was up against when she knocked on her neighbors' doors and jammed homemade flyers under their windshield wipers. The flyer posed a simple question: *Are you tired of the dust and the smell*?

Her working class neighborhood included a number of residents who held jobs at local industrial facilities. Among the first to respond to Weckesser were Fred Nelson Sr. and his wife, Bobbie, who had lived there since the 1990s. Fred had worked in shipyards, but he only started to notice the severity of the odors after retiring and spending most of his time at home. He understood the basics of chemical emissions and became so concerned that he wore a mask to mow his lawn.



Map source: ProPublica analysis of EPA data. Credit: Lucas Waldron/ProPublica

The Nelsons and other neighbors joined Weckesser to form the Cherokee Concerned Citizens, a group that started speaking up at government meetings and talking to regulators, industry representatives and local journalists. "We've had five cases of pneumonia in our neighborhood in the last couple of months," Weckesser told GulfLive.com in May 2014. Bobbie Nelson told the Biloxi Sun Herald that a doctor recommended she

4 of 15 . 12/1/21. 11:16 AM

leave the neighborhood — "Like you can do that, just pick up and move," she said to the reporter.

In the summer that followed the interviews, MDEQ cited VT Halter for violating dust, odor and air toxics rules after an inspection found leaking paint and solvent containers, among other problems. The agency fined the company \$145,000 and ordered it to speed up the construction of a building that would trap the emissions from painting. It made little difference to the Concerned Citizens, who could still smell fumes.

A few of the neighbors started to keep formal odor logs in late 2014, in the hopes that the information would force MDEQ to clamp down on polluters. Weckesser's first entry noted moderate "fumes from welding or something like that," accompanied by an "immediate" burning in her eyes and nose. The neighbors' logs often corroborated each other. One day, the group recorded a "severe" acid smell, burning eyes and "numb" lips. Another day, they registered something they could only describe as a "sick" or "weird" smell. A neighbor reported a sick stomach; Weckesser recorded a raw throat.

In the fall of 2016, two years after residents began logging symptoms and odors, state workers placed several metal canisters around the Cherokee Forest subdivision, which were designed to capture samples of the neighborhood air for 24 hours.

The results, released in January 2017, revealed that residents were breathing in an array of cancer-causing pollutants. Some samples captured concentrations that were above values the EPA said should trigger further investigation; the toxics they found included 1,3-butadiene, which can irritate the eyes, throat and lungs, and benzene, which can cause headaches and dizziness. Both can lead to leukemia.

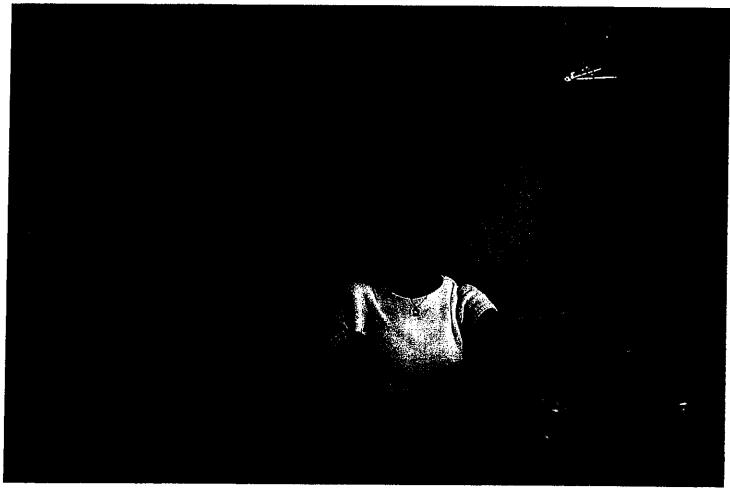
State regulators knew from the start that they wouldn't be able to blame specific facilities for these emissions. "Since only a limited number of samples are collected over a relatively short period of time," the agency wrote in its report, "the information obtained cannot be used for enforcement or compliance purposes."

The EPA says it "strives" to minimize the number of people subjected to an excess cancer risk higher than 1 in a million — meaning that if a million people were exposed to the same concentration of industrial pollution over a lifetime of 70 years, at least one person would likely develop cancer; that risk is on top of other risk factors like age, diet and genetic predisposition. The agency sets the maximum acceptable industrial cancer risk at 1 in 10,000 — a level 100 times less stringent than the 1-in-a-million goal. Numerous experts told ProPublica it was too high.

The Pascagoula residents wanted someone outside of MDEQ to do an analysis of the health risks, so they sent their monitoring results to Mark Chernaik, a scientist at an <u>environmental health nonprofit</u> in Oregon. Chernaik calculated the combined cancer risks posed by five carcinogens detected in the samples; he chose those compounds because California's environmental agency — a regulator known for its extensive

environmental health expertise — had fairly up-to-date data on how the chemicals affected cancer risk. The most concerning sample showed a cancer risk of 1 in 10,600, barely meeting EPA's 1-in-10,000 threshold.

The results crystallized the risks for the Nelsons' daughter, Barbara, a preschool teacher who lived outside the subdivision, but who was at her parents' home almost every day. She'd noticed the pollution getting worse since 2011, and in 2014, she joined Weckesser in logging the odors. "I knew there was something wrong," she said, citing how several of her neighbors had died of cancer in recent years. "When we saw [the monitoring results], we were like, 'Oh my God, you mean to tell me these people were allowed to use this stuff, knowing it causes cancer?' And they seemed to think it was OK. No, it's not OK. People are dying, you idiots."



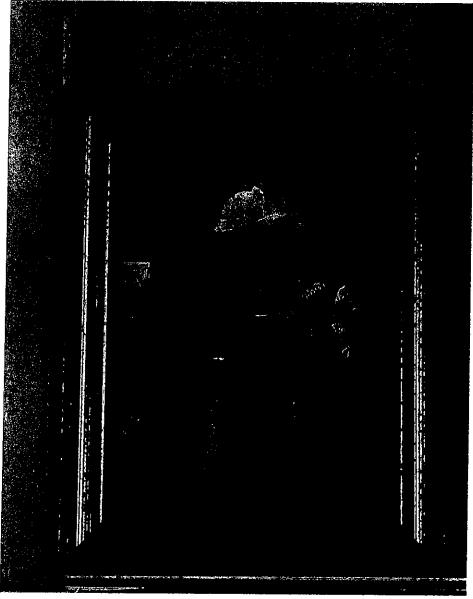
Barbara Nelson sits in her parents' home in Pascagoula.

Her father, Fred, was diagnosed with pancreatic cancer in September 2017, she said. He died the following month. Though it's rarely possible to know whether air pollution contributed to a specific cancer case and scientists know little about the causes of <u>pancreatic cancer</u>, limited evidence suggests that <u>exposure to benzene</u> and other contaminants may increase the risks.

ProPublica conducted its own analysis of the annual emissions estimates reported by facilities near the Cherokee Forest subdivision. Data from 2014-18 shows the excess lifetime cancer risk in some parts of the neighborhood, including Weckesser's home, was estimated at 1 in 42,000,

due to emissions coming from five facilities. ProPublica found that <u>the EPA underestimates the cumulative risk</u> faced in neighborhoods like this one, which are surrounded by polluters, because it examines the impacts of facilities by category, without considering the combined risks when multiple types of polluters are clustered together.

The estimated average risk at the Nelson home over those five years was 1 in 6,100; in 2015, it reached 1 in 2,900, more than three times higher than the EPA's threshold. Barbara Nelson believes the pollution from nearby facilities contributed to her father's death. "These people need to be held accountable," she said.

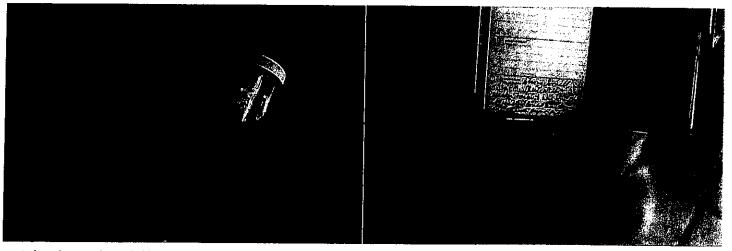


Fred and Bobbie Nelson, Barbara Nelson's parents. Fred died of pancreatic cancer in 2017.

Almost all the risk on the Nelsons' block came from VT Halter's chromium, nickel and ethylbenzene emissions, the analysis showed. VT Halter told ProPublica that its reported hazardous emissions were accurate, but it did not comment on their impacts. "Halter Marine is committed to being a responsible environmental partner in our community" and "strictly adheres to all Federal and State environmental

guidelines," the company said in a statement. It cited a \$10 million "large state-of-the-art integrated blast and paint facility" it built in 2018 to contain dust and air pollution. VT Halter "has also invested in reducing dirt and sand in the air by paving various areas of the yard where heavy equipment such as cranes move through the facility," the statement said. "Halter Marine is proud that we have not had a violation citing since 2014."

MDEQ took two more air samples in 2017. One of them, captured near Weckesser's house, reflected a risk of 1 in 9,000, according to Chernaik's calculations. Despite the rare piece of concrete evidence that subdivision residents were being subjected to unacceptable cancer risks, MDEQ didn't continue testing.



Left: Barbara Weckesser holds a paper towel covered in dust she collected from her car. She says the dust comes from VT Halter Marine in Pascagoula. Right: Weckesser holds a journal she uses to log pollution and symptoms she experienced.

Aside from an initial phone call covering basic questions, MDEQ officials declined multiple requests to discuss how it regulates air toxics, answering questions only in writing. Regulators would not meet in person when a reporter spent two days reading public records in the agency's headquarters, several floors below the Air Division office. In an email, spokesperson Robbie Wilbur said the MDEQ reviews the emissions data reported by facilities and appropriately handles any violations it discovers. MDEQ also conducts "routine unannounced" site inspections to ensure industrial plants comply with their permits. Outside of emergency situations like chemical fires or gasoline spills, MDEQ hasn't performed air toxics monitoring since June 2017, he said, noting that the results from the Cherokee air monitoring "showed no contaminant levels of concern."

Enck, the former EPA regional director, saw MDEQ's response to the sample data as akin to the military's now-abandoned "Don't Ask, Don't Tell" policy. "This is the culture at a lot of agencies," she said. MDEQ could have "drilled a few levels deeper," reviewing permits and requesting data on the efficiency of the facilities' pollution-control equipment, said George Czerniak, a former director of the air division in the EPA region surrounding Chicago. The agency could have ordered nearby facilities to conduct one-time tests to measure the air toxics coming out of their smokestacks. This data could show whether facilities are violating their permits and could lead to real enforcement, Czerniak said.

The EPA can do all of that as well, but it rarely does, preferring to defer to state regulators, Enck said. "Most of the time when we told [state] agencies that we were going in to do something enforcement-wise, or enhance testing, the agencies get very defensive and try to wave off the EPA." The EPA's reluctance to act comes down to "political sensitivities," Czerniak said. "It really is more of a failing of those regional offices, in my mind, and the failure of EPA enforcement headquarters to make the regions step up."

ProPublica's analysis found that almost all of the nation's worst hot spots — those with the highest levels of risk from air toxics — are in Southern states known for having weaker environmental regulations.

EPA Administrator Michael S. Regan told ProPublica that he has directed the regions to be good "co-regulators" with states and step in more aggressively when those agencies aren't doing enough. "The states have lots of delegated authority, and we expect the states to execute on that delegated authority," he said, "but if they don't, EPA will step in, we will lean in, and we will ramp up our enforcement capabilities."

It would be a lot easier to hold facilities accountable if the EPA required more air monitoring.

There is no substitute for monitoring at the smokestack, said Scott Throwe, a former senior staffer in EPA's Office of Enforcement and Compliance Assurance. In 1993, the agency proposed a rule to require more extensive stack monitoring. But Throwe said it faced opposition not just from industry, but also from the leadership in EPA's Office of Air and Radiation. "The last thing they wanted was controversial requirements added to any regulations that would generate significant public comments and potential litigation," he said.

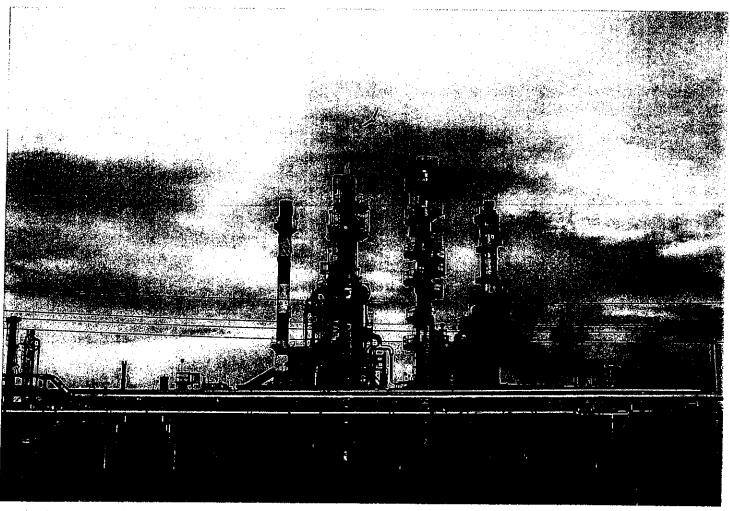
State and local pollution-control agencies, too, protested that it was "too costly given the benefits involved, too burdensome on local permitting authorities, inconsistent with congressional intent regarding costs, and likely to stifle innovation," according to a summary by a federal court in a lawsuit brought by the Natural Resources Defense Council, an environmental group. NRDC had sued the EPA after it adopted a watered-down version of the monitoring rule in 1997. The group argued that the rule — which didn't require continuous emissions monitoring at the stack — failed to comply with the Clean Air Act. The court ruled that it did.

In the years that followed, the EPA worked alongside industry to bat down other attempts to force real emissions monitoring. In 2008, for example, the NRDC sued the EPA over emissions from certain chemical manufacturers. NRDC argued the agency shouldn't be allowed to assess the health risks from those facilities based on incomplete data that was self-reported by companies. The <u>numbers the NRDC contested</u> came from the American Chemistry Council. The EPA argued it would have been "very costly and time-consuming" to get better data. NRDC lost the case.

There is only one exception to the lack of routine air monitoring of hazardous pollutants. One kind of facility, refineries, must monitor the air continuously for one chemical, benzene. This doesn't happen at the stack,

but at the edge of the industrial property, called the fence line, so it reflects what is dispersing into surrounding areas. When the EPA first floated the rule in 2007, the American Refining Group called it "technically and economically cost prohibitive." Citgo Petroleum wrote that it would place an "unfair burden" on refineries, as the instruments could detect benzene from other industrial facilities that weren't required to monitor for the pollutant. EPA backed off.

But unlike most other types of facilities, refineries cannot escape public scrutiny. There's a strong history of local activism near these heavy polluters, and academics have amassed a robust body of research about what happens to people living near them. In 2012, a coalition of community and environmental groups sued the EPA, demanding that the agency force these facilities to monitor and limit refinery emissions. The Obama administration adopted the benzene rule in 2015. The EPA set an annual average of 9 micrograms per cubic meter as the maximum concentration expected from any refinery at the fence line.



The Chevron Pascagoula Refinery.

In 2019, 10 refineries — including the one owned by Chevron in Pascagoula — exceeded the EPA's benzene guidelines. Data from the company's 22 monitors around its Pascagoula facility showed average concentrations of roughly 10 to 16 micrograms per cubic meter from April 2018 to March 2019. The <u>following year</u>, 13 refineries nationwide exceeded EPA's limits.

The EPA had set its threshold of 9 micrograms per cubic meter after taking refineries' self-reported emissions data and conducting air modeling to see what concentrations would be like at the refineries' boundaries. If every refinery had truly released as much benzene as it claimed in its reported estimates, its fence line benzene levels would have remained below that limit, said Babich, the Tulane professor. "Which leads you to believe that either their monitoring or estimating methodology is not up to snuff, or they're lying."

Chevron spokesperson Tyler Kruzich said the company has "voluntarily installed additional" air monitors in and around the Pascagoula refinery to help technicians pinpoint the source of leaks and make repairs. "As a result of our efforts, fenceline readings have decreased and are below the regulatory action level."

The refinery brought down its benzene levels to 8 micrograms per cubic meter in 2020.

In Pascagoula, the headaches continue.

Wilma Subra, an environmental health expert who helps communities struggling with pollution, surveyed 80 residents of the Cherokee Forest subdivision between 2018 and 2019. Almost everyone reported noticing industrial odors, for an average of 22 days a month. Many believed these crude oil, ammonia or sulfur-like smells were linked to their ailments: sinus problems, rashes, burning eyes, nausea and dizziness. Subra said their experiences are typical of fence line communities all over the country. Even when residents exhaustively document the problems, they can't get the government to take meaningful action.



11 of 15

1011101 11 12 1

Environmental health expert Wilma Subra in Cancer Alley, a part of Louisiana that's known for clusters of industrial facilities.

Barbara Nelson got too busy taking care of her mother, who was recently diagnosed with Alzheimer's disease, to do much activism, but Weckesser has carried on. Now 74 years old, with a crown of white hair and thick glasses, Weckesser still contacts the MDEQ any time she smells something strange.

On Dec. 16, 2019, she called MDEQ about "a strong acid smell." An inspector drove around town and noticed odors near VT Halter and outside of every facility along the aptly named Industrial Road. "It was a foggy day and the odors seemed to be held in place by the weather," the inspector wrote. The file made no mention of using scientific instruments or any tools beyond the inspector's own nose.

Weckesser complained to MDEQ at least 30 times last year alone, including five times in one week. After she reported a smell coming from Chevron, refinery officials pledged to install odor-eliminating technology so the next time they performed the offending process, which involved inserting nozzles on the side of a tank, it would "either smell like green apple or flowers."

In an emailed response to detailed inquiries about the Concerned Citizens, Kruzich, the Chevron spokesperson, said the company's employees "meet regularly with local residents to answer questions about refinery operations and safeguards. ... We have also developed a rapid-response protocol and notification system for residents to report nuisance odors to the refinery, for refinery teams to quickly assess the complaint, and to then conduct real-time community air quality monitoring when our initial assessment supports it." He declined to provide any details about the monitoring results.

The Concerned Citizens got their hopes up when VT Halter applied to renew its air permit last year. They thought they might be able to influence the MDEQ to include extra air monitoring requirements, or maybe even reject the application. "We are not environmental expert," retail worker Duyen Tran and her husband Quy wrote to the agency. "We are not rich" enough "to do air (water or soil) test every day. … We have suffer health impact much more than enough for human's physical strength. We need help to be out of this dilemma."

The Trans had kept odor logs back in 2014, and Duyen was grateful that her job took her away from the subdivision's contaminated air for most of the week. To make herself feel safer, she filled her home with plants recommended for improving indoor air quality, including foxtail ferns and peace lilies. She wants a buyout so her family can move somewhere safe.

Residents were devastated when they learned that MDEQ renewed VT Halter's permit without additional requirements. The Concerned Citizens' only remaining option is to sue, and the group doesn't have the resources for that. Robert Wiygul, an attorney at the local law firm Waltzer Wiygul

Garside, said his efforts to help them have stalled due to the costs of air monitoring and other technical work needed to bring a case to court — work that would essentially duplicate what regulators ought to be doing anyway, he said.

Weckesser summed up her frustrations in a November 2020 letter to MDEQ. "Depression has set in because DEQ doesn't seem to get our message about what it is like to have to live here," she wrote in looping cursive. She put it more bluntly in an interview with ProPublica: "I've felt weary and I've felt a struggle, and it's like, Why in the world won't you SOBs pay attention to us?"

This April, rumors swirled that the EPA's mobile air monitoring van was in town taking samples. Carol Kemker, director of enforcement and compliance assurance at the EPA regional office that oversees Mississippi, said that the agency brought the van over from Denver as part of a focused effort to investigate emissions in the area. The monitor took samples at and near local polluters, including VT Halter and Chevron's refinery. In late summer, the agency used more advanced tools to look for leaks and pinpoint sources of emissions, Kemker said. (This further investigation occurred after ProPublica began asking state and federal regulators about the toxic hot spot revealed in our analysis.)

Kemker called Pascagoula one of the "top areas" she is now focused on, selected because of the persistent complaints, the scope of industrial polluters in the area and the proximity of neighborhoods to these facilities. "We've heard the community. We're really trying to do a very thorough investigation," Kemker said, adding that MDEQ was "a very willing partner" to conduct joint investigations.

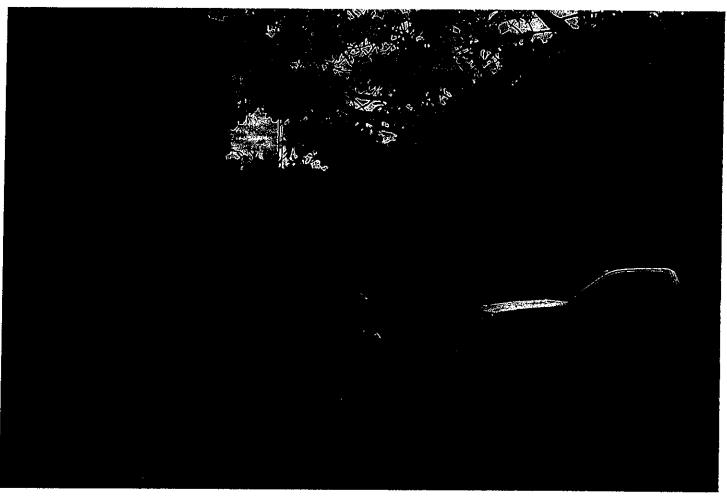
Enck said the EPA's investigation is an encouraging sign. When the agency puts its resources into a community, "it can be a catalyst for change," she said. "But the trick is getting them in there. ... It shouldn't be so hit-ormiss."

EPA's southeast regional office has 25 employees in the air enforcement branch responsible for eight states, Kemker said. "We have pulled resources from across the country to aid in this investigation, and my desire is for us to get the answers as quickly as possible."

Results from the monitoring and leak detection are pending. But Weckesser may not stick around to see them. She owns a second home in Kentucky, where she once planned to spend half of each year, but which she has only visited intermittently because of her activism work in Pascagoula. Now she's considering a permanent move. Her husband has kidney problems and a lung condition called chronic obstructive pulmonary disease. Weckesser worries there will be no one to take care of him if her health declines, too. "I want to get the hell out of here," she said, adding that she wishes she could take her neighbors with her. "I don't want to leave them behind.

"My worst fear is that half this subdivision or more is going to end up with a serious illness or die," she said. "And no one is going to acknowledge or recognize that it was from industry."

13 of 15



Barbara Weckesser stands in her backyard in Pascagoula.

Mariam Elba contributed research.

Filed under — Environment

This story you've just finished was funded by our readers. We hope it inspires you to make a gift to ProPublica so that we can publish more investigations like this one that hold people in power to account and produce real change.

ProPublica is a nonprofit newsroom that produces nonpartisan, evidence-based journalism to expose injustice, corruption and wrongdoing. We were founded over 10 years ago to fill a growing hole in journalism: Newsrooms were (and still are) shrinking, and legacy funding models are failing. Deep-dive reporting like ours is slow and expensive, and investigative journalism is a luxury in many newsrooms today — but it remains as critical as ever to democracy and our civic life. More than a decade (and six Pulitzer Prizes) later, ProPublica has built one of the largest investigative newsrooms in the country. Our work has spurred reform through legislation, at the voting booth and inside our nation's most important institutions.

Your donation today will help us ensure that we can continue this critical work. From the climate crisis, to racial justice, to wealth inequality and much more, we are busier than ever covering stories you won't see anywhere else. Make your

gift of any amount today and join the tens of thousands of ProPublicans across the country, standing up for the power of independent journalism to produce real, lasting change. Thank you.

Donate Now

Lisa Song

Lisa Song reports on the environment, energy and climate change for ProPublica.



☑ Lisa.Song@propublica.org ☑ @lisalsong ☐ 917-512-0232

₽ Signal: 646-712-0120

Ava Kofman

Ava Kofman reports on technology. To send Ava tips, email ava.kofman@propublica.org, or text 347-410-0113.



💌 Ava.Kofman@propublica.org 🔰 @avakofman 🔒 Signal: 347-410-0113



Cherokee Forrest Sub Survey Results

97 out of 132 households completed survey.

307 adults and children surveyed. Roughly one third of surveyed were children. Roughly 53% of households surveyed have children.

Household Size:

Median: 3 Average: 3.2

Years of Residency:

Median: 15 years Average: 18 years

94 households report loud noises, dust, and strong odors. The following are some of the comments included in survey about the noise, dust, and odor.

NOISE

"The noise is so loud that it rattles and shakes the house."

"The noise is so loud I cannot focus."

"The noise wakes me up at night."

DUST

"My shed is covered with dust."

"My car is covered with dust."

"The dust comes in through the vents."

"I have to change air filter every two weeks."

ODOR

"It smells like gas and burns my eyes, nose, and throat."

"The odor makes me dizzy."

"The smell takes my breath away at times."

"I ride daily through the neighborhood, the smell is so bad I wear a respirator."

"Ammonia smell is so strong I can smell it in my house."

10 out of 97 households report none of the following symptoms. Of the 10, only three report no loud noises, dust, and/or strong odors. More than 60% of residents surveyed are experiencing at least one of the following symptoms.

0-12 years

Pneumonia: 4

Respiratory Infection: 11 Sinus Infection: 28

Hospital Stay: 6

12-21 years

Pneumonia: 1

Respiratory Infection: 8 Sinus Infection: 17

Hospital Stay:

This is our first health survey. The other done by Mr. Wilma Jubra. 21-40 years

Pneumonia: 5

Respiratory Infection: 17

Sinus Infection: 33 Hospital Stay: 2 40+ years

Pneumonia: 20

Respiratory Infection: 42

Sinus Infection: 60 Hospital Stay: 11

30 total cases of pneumonia reported. This accounts for about 10% of those surveyed and is about 10 times the national average of reported cases for pneumonia.

78 total reported having at least one respiratory infection.

138 total reported having at least one sinus infection.

22 total reported hospital stays.

The following are a list of other symptoms/comments residents wrote in survey:

Headaches

Upset stomach

Vomiting blood

Excessive coughing and mucus

Weight loss

Water and burning eyes

Scratchy and itchy throat

Fatigue

Chronic sinus problems

Diagnosed with severe allergies

Diagnosed with asthma

Diagnosed with acute bronchitis

[&]quot;My child has been hospital 10x in one year."

[&]quot;I get really sick every time I go out to my shed that is covered in dust."

[&]quot;I got really sick after mowing my lawn."

[&]quot;I feel better when I am away from home."

[&]quot;I have noticed an increase in sinus problems since moving here."

[&]quot;It seems to be getting worse."

September 27, 2017

MR. Gary Rikard

MDEQ

P O BOX 2261

Jackson, MS 39225

Dear MR. Rikard,

Find enclosed copies of test I paid for after Biloxi MDEQ was here and refused to test anything. Their answer in their report sounds like just dust. Well I knew it wasn't just dust!!!! Reports prove me right. Chair and grill positive with high counts of metal plus all the other chemicals. MR Burchfield sent a letter as if there was nothing to be concerned about with all their pictures what about a test of the dust is that asking to much!!!! Guess so. So I paid for test to get done. In our process working on our health issues, air to breathe, seems as though most MDEQ employees want to turn their head and ignore citizens. If this had been addressed in 2013 we may not be looking at another resident having cancer this last week. MR Burchfield chose not to find problems in the past with Signal said it wasn't there only for employee to report to EPA they found it. All industries close to this area have choosen to go over emission levels allowed by permit. Why work on a permit process as we were told to do none have gone through and VT HALTER hasn't come up for renewal since 2014.

Test on soil, water, and dust all have proven positive even MDEQ air test per employee testing here overnight caught sand blast coming off property.

MR Rickard I ask of you, take action, force the law, and investigate these Title V industries all are guilty of not staying with in their permit.

Sincerely, Zarbasa Weckessu

Barbara Weckesser

1502 Cherokee DR

Pascagoula, MS 39581

Cc: David Burchfield

Cc: Melissa Collier

Mr. Burchfield, Since you are the Heavy metal person Explain to your boss Why Cobact arsenic, Son, Ditanium would be on My grill on my carport Grongh Jime for action Barbara Wecksser 9-27-2017

I am unable to attend meeting tonight, I have been sick for last 4 months. I want to pubmit this letter with Chevron test taken 4-17-17. not one test done here has shown neg. all have shown postive for chemicals. Hoto have been taken by MDEQ, Churon, M.S. Phop. and Cherokee Concerned Citizens. Ohr neighborhood has blen distroyed by industry. Mr. M. Magum Was here as a sup, for Gackson Co. at one offist test gueso he forgot to tell me Ms. Phop Mad just heen placed on a cease de-order. That was 2013 Health Durveys presented to country & city Showed our resp. problems With As action on their part all back to MDEQ Here we are now in 2017 to learn industrys output excess fermit limit MDEQ knew it, but

We were told nothing to harm us. Wow now EPA has Mr. Phop problem because MIE 9 per their duote in paper for fear of health hazards. I have documents to back testing back To Nov. 2011. This is when most Treis how started to say they noticed health issues. Hease make this Part of record tonight. It is sad residents lives are in harm to grotest industry that won't do the right thing, on top of that City removed our buffer your for Halter to grow and let pollution from all industries have a If irect line to this out. That has been here for over 60 years.

Sincerely, Barbara Weckesser 1502 Cherokee Pascagona, MS. 39581 9-5-17

The Sun Herald

Previous Story Next Story

Pascagoula neighborhood may be last to learn of air-quality issues

By KAREN NELSON

kinelson@sunherald.comMay 30, 2014 Updated 9 hours ago



JOHN FITZHUGH/SUN HERALDOn May 13, Barbara Weckesser shows the dirt that has accumulated on her car in the previous week in the Cherokee Forest neighborhood in Pascagoula. Weckesser said the nearby industries along Bayou Casotte are the source of air and noise pollution. JOHN FITZHUGH - SUN HERALD |Buy Photo



PASCAGOULA -- Myrie Jeter asked her city councilman Thursday night if there isn't a way to alert east Pascagoula residents when nearby industry is releasing dangerous emissions.

"Couldn't I have a warning or an alarm on my phone?" she said. "I get a warning for flash flooding."

She referred to a case in late summer 2013 when the state Department of Environmental Quality shut down two plants at Mississippi Phosphates because neighboring industries reported employees having breathing problems, dealing with acid mist in the air that made their skin burn.

One industry evacuated employees and the other had them shelter in place, but residents weren't warned. Jeter said she and her husband were in their yard and "it took our breath away" and gave them headaches.

"I'm astounded they would shelter their employees and not tell us ... residents only a mile away," she said.

Jeter and others from the Cherokee Forest area, which has about 150 homes, told city leaders they don't like being left in the dark. Some talked of serious illnesses and hospital trips. They spoke out at a town hall meeting called by Ward 3 Councilman David Tadlock that also brought up traffic issues and what to do about overgrown lots. But Tadlock said communication with industry and the state agency that regulates it was obviously an issue, adding, "We've got to figure out a way to co-exist."

People in the area have formed the group Concerned Citizens of Cherokee because in recent years, air and noise issues along heavily industrialized Bayou Casotte have become more prevalent. They say a sticky dust blows in and a strong acrid smell lingers day and night, even though the area has for decades co-existed well with industry.

Residents asked how the city might determine what is a safe emission for people living in the area, and asked if medical personnel might get involved.

City Manager Joe Huffman suggested until something else is set up, residents should call 911 if the air makes them feel ill.

State Sen. Brice Wiggins, who represents the area and lives nearby, told the 50 or so attendees and city officials at the meeting the first time he heard about the air issues was when he read it in the Sun Herald. But now that it has been brought to his attention, he will call state officials. Tadlock said this came to light during his first months in office and he plans to work to facilitate meetings with industry leaders and the DEQ to resolve air-quality issues. He said the city doesn't regulate industry and wondered if there are gray areas in the permitting process for industry.

The Sun Herald

Previous Story Next Story

East Pascagoula resident told to call 911 about air issues

By KAREN NELSON

klnelson@sunherald.com Twitter:May 29, 2014



CHRISTINA STEUBE/SUN HERALDAbout 50 residents and officials in attendance listen during the Ward 3 town hall meeting at Ingalls Avenue Baptist Church in Pascagoula on Thursday.





PASCAGOULA -- Jackson County Emergency Management Director Earl Etheridge told the Sun Herald some of the companies along heavily industrialized Bayou Casotte are getting better about letting the county know when there are releases or leaks.

The issue has come up because a mile away, in an east Pascagoula neighborhood of 150 homes that has co-existed peacefully with industry for decades, residents have begun complaining of a sticky dust and acrid smell lingering day and night. They formed Concerned Citizens of Cherokee, claiming health problems from breathing the air or stirring up the dust in their lawns, and they want to know why they can't receive some kind of warning from industry.

Etheridge said although there have been improvements, there is still a disconnect with the state Department of Environmental Quality, which regulates industry. The notifications he gets are more often from the plants themselves.

Etheridge said he then alerts the city, whose job it is to tell the neighborhood.

But there's still the issue of what constitutes an emergency for notification. What people living in the area might like to be informed about might not be considered an emergency.

For example, Mississippi Phosphates notified the state Wednesday it would exercise its permitted right, under emergency conditions, to bypass normal wastewater treatment and dump partially acidic water into Bayou Casotte.

Etheridge notified the city. But there was no need for evacuation or alerting the public, he said. Noise and dust is not an emergency, he said.

"But in a true emergency," he said, "we'd bypass the city and go to the neighborhood directly."

Late last summer, the state shut down two Mississippi Phosphates plants because neighboring industry complained of burning acid mist in the air from June through August, requiring them to evacuate employees at times. But there was no notification to the neighborhood.

In that case, Etheridge said, he alerted the Pascagoula Fire Department, which sent units to the neighborhood but found "no impact on that particular day at that particular time."

"They have problems out there," he said. "The industries have not done everything they can to notify the people. And there are some regulatory concerns that haven't been met concerning the noise and dust."

PacebookTwitterGoogle PlusRedditE-mailPrint

Join The Conversation

The Sun Herald is pleased to provide this opportunity to share information, experiences and observations about what's in the news. Some of the comments may be reprinted elsewhere in the site or in the

Subject: Answer From ASK OSHA

osha_ecorrespondence@doi.gov (osha_ecorrespondence@doi.gov)

Date:

Tuesday, March 4, 2014 6:18 AM

*** PLEASE DO NOT SELECT "REPLY" ***

THIS EMAIL HAS BEEN ROUTED TO YOU THROUGH AN AUTOMATED FEDERAL OSHA SYSTEM.

PLEASE REFER TO THE INFORMATION BELOW.

Disclaimer

Halter Pascagoula, MS is about 700ft from my back door. My car and neighbor's car have tested positive for Black Beauty if we are getting

Submit Date: 27-FEB-14 08:53:12 AM

Thank you for your concern.

We recommend that you contact OSHA's Jackson Area Office directly and speak with the duty officer about your concerns and your complaint of

Jackson Area Office Dr. A.H. McCoy Federal Bldg. 100 West Capitol Street Suite 749 Jackson, MS 39269-1620 Ph: 601-965-4606 Fax: 601-965-4610

Thank you for your interest in occupational health and safety.

This response is for informational purposes only and does not constitute an official communication from the U.S. Department of Labor, or the

I am sending this to you for you to look at VT Halter Pascagoula needs to be Checked. If I am 600 to 700 yards from Them and our neighborhood is covered. What are the employees breathing. I'm sure not all have a mask. Barbara Wickesser 251 680-2204



Cherokee Neighborhood Outreach Meeting

RE: Air Quality, Noise Issues, etc.

Wednesday, December 18, 2013 5:30 pm

City Hall— Council Chambers 603 Watts Avenue Pascagoula, MS 39568

For Additional Information Contact:

Jen Dearman

Telephone: (228) 938-6651

E-mail: jdearman@cityofpascagoula.com

Info for yor. I also have preumonia. That makes 3 residents and yard puson in less than 500 ft from each other since aug. That I know about. Thanks, Barbara Weekesser

rage I OI I rnnt

Subject: Re: 1502 Cherokee Problems

From:

Diane_Gledhill@deq.state.ms.us (Diane_Gledhill@deq.state.ms.us)

To:

disneygirlbarb@att.net;

Date:

Wednesday, October 30, 2013 1:34 PM

Mrs. Wekesser

I got your phone messages yesterday and today and have sent your information up to David Burchfield in Jackson. There is really nothing any of us can do at the regional level at this point except document

the complaints and forward them to ECED. I'm sorry. I wish there was more I could do.

Diane



STATE OF MISSISSIPPI

PHIL BRYANT **GOVERNOR**

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

TRODY D. FISHER, EXECUTIVE DIRECTOR

May 17, 2012

via e-mail to Guzman.Humberto@epamail.epa.gov

Mr. Humberto Guzman **EPA Region IV** Atlanta, GA

Dear Mr. Guzman:

DURECTOR

DURECTOR

What the state of the st

On February 27, 2012, MDEQ received the anonymous complaint you forwarded concerning materials being swept and/or pumped into Bayou Cassotte. More specifically, these materials included paint, trash, and other materials removed from the Henry Goodrich oil rig using 40 kpsi hydroblasting. Wastewater allegedly pumped into the Bayou contained chemical degreaser.

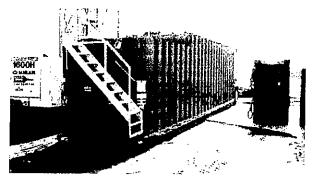
On February 29, 2012, I went to the facility to investigate. I met with Mr. James "Toman and Mr. David Milton and informed them of the purpose of my vicit my such practice and briefly explained their procedure and observed the rigs they had on the

Facility personnel were not disposing of wastes by sweeping or pumping them into the Bayou during my visit. Sheeting is arranged around rig openings and on scaffolding to prevent wastes from becoming airborne or inadvertently escaping the rig.

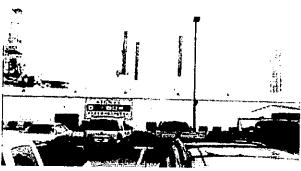
The water around the rig was the same color and clarity as further up the Bayou or into the Gulf. There was no apparent discoloration or increase in Total Suspended Solids. From my investigation, I am unable to determine that a violation has occurred.

We appreciate receiving information from concerned citizens interested in their environment. We will investigate further if we receive further complaints, and will continue doing our regular unannounced inspections.

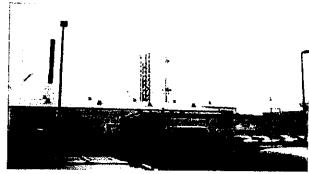
Following are the pictures taken during our tour of the facility.



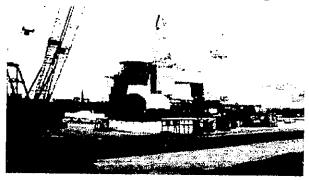
Picture 1 – Frac tank for storing water and liquids used for hydroblasting.



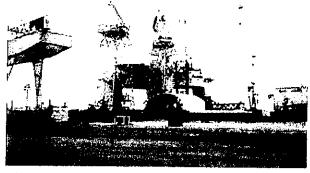
Picture 2 – The legs of jack-ups in the Bayou for repair, seen over the roof of a building.

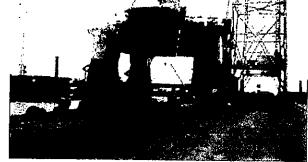


Picture 3 – Another view of jack-up rig legs.



Picture 4 – The semi-submersible oil rig Henry Goodrich.





Pictures 5 & 6 - More views of the Henry Goodrich as we got closer to it.

card dison J: 20-10 45 AM 5 4.14 Mr. Forter granswer and rodont admit spelled the aders. Offered for me to come over Come out for went on how Confessed the of MIS Phosphate Sidelaring of 11 115 & dust Left message with Mr. Medels & Mr South Cheron meter shows nothing of the flow (cop) My Witchen Cheven l'e Duran come set and smelled smell but wildn't disorbe Mist Chan 938 2864 VM-Ms Fields 10 Mr. new 1/ 1/2 to Consultation Sothenatication NM JUS Sphare M Bata de Wien CB - Sidding out gays - Never showed up CB. Saids its not them

6-3-19 mell could be tasted and sort of the Called VT he sneltit too Calling MDEQ torepost.

Called MS Pho. Thexane out 45 mins
taker and theosmall was gone. Brought
502 monitor and picted up nothing.
Still tasting smell and short of
brooth when he left.

Left message for Mdey south, Ms. Collier
This. Beardon, Mr. Junkers

Called Signal and they said would

Mr. Sorders called back and will downerst
Ms. Dearmon Called and get it documented

(1. 35-1479 , 100 200 willen, 40 tron the boy on that shake the whole house there was also banging and strong sicks the last I lays. Ca'd all the product and all it to it want there we firster from UT Hower core wer and walked the block not Swelling arethog. We then wet with , Us, Buring and with Alle from Charen. we all got in , il Festers were and deave , evend about 45, A-1 horr. We followed the sun! Barroard and detorned Huas eur y from MIS Phosnates As we wor Teaving Thirth, from 11 . M. shotes showed . D. RONG He Holland is and to found the smallthe Timy had a golden (Co) a extor. It should nothing. But he Encled + to, to out front all three companies could identy the swell.

- Moves eight

MDEQ COMPLAINT INVESTIGATION REPORT

routing this complaint to ECED for further investigation.

Mr. Sam Cunningham's phone number is 228-712-330

May 16, 2012

Ms. Hilda Sherman 4602 Chippewa Avenue Gautier, MS 39581

Dear Ms. Sherman:

Re: Air Complaints - Paint overspray
Complaint 34155
VT Halter Marine, Pascagoula Operations
Title V Operating Permit 1280-00008
Jackson County, Pascagoula, MS

Several complaints, including yours, of paint overspray, possibly from VT Halter Marine, Pascagoula Operations (Halter), have been investigated by MDEQ's South Regional Office personnel. A copy of your complaint and investigation results is attached. It may also be viewed on-line through MDEQ's web site at http://opc.deq.state.ms.us/cts_status.aspx.

Since three similar complaints (including yours) were apparently the result of one incident and were physically located fairly close to one another, my supervisor, Mr. Mohammad Yassin, and I decided to investigate further. The results of our investigation are summarized in my letter to Halter, a copy of which is enclosed. Their response was to install additional controls, as shown in their attached letters. MDEQ is also requesting additional monitoring and recordkeeping to see if further controls are needed.

Please be aware that MDEQ has made no finding that Halter is the source of your problem. Halter personnel have pointed out that construction and maintenance from facilities across the Bayou also do spray painting and have emissions from their process equipment. Another possible source, Signal International's facility to the south of Halter, reports that their spraying operations are mostly done inside a building, or are fully wrapped with screening material. All of these facilities are further from your home than Halter, but are still in the same general direction.

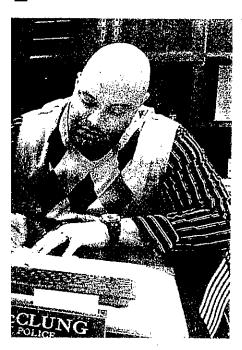
If further reports of overspray are received, review of this data may help determine if further controls at Halter are necessary.

Sincerely,

David Burchfield Metal and Metal Fabricators Branch Environmental Compliance and Enforcement Division

Enclosures

hief shares partment



s recently appointed Moss Point's ief after serving as the interim chief amation of Keith Davis.

increase to resence." could be w Year's cks were he city, out in full ays the ess, and to show hat safety

to everys that we a good nyone e said. stabbing, dt. As a clubs that problems Ve did

; more ; says com-10 a main ... who are committing these crimes to know that we're going to be consistent, diligent, and I have true perseverance, if people haven't figured that out yet," he said.

"We're going to use whatever lawful techniques that we come up with and that are already out there to combat it."

Community engagement is something McClung also wants to encourage. He says he wants to do more to connect with the community and plans to keep programs like the National Night Out Against Crime event and others that he feels have been successful.

Meanwhile, he plans to add other programs, especially for children and youth.

"Lwant to get out in

V.T. Halter fined \$144K, group says smells, dust, noises continue

April M. Havens ahavens@al.com

East Pascagoula residents say their neighborhood continues to be plagued by industrial dust, noise, paint spray and smells despite fighting the issue for months.

They said conditions haven't improved even after the Mississippi Department of Environmental Quality fined VT Halter Marine \$144,545 for allowing sandblasting particles and paint to become airborne.

The environmental regulator found that the shipyard, owned by Singapore Technologies Engineering, committed a total of 44 violations documented in a May 2014 inspection. Other problems included:

▶ Improperly storing and labeling paint, solvent and oil.

Sending hazardous waste to regular landfills.

Allowing oil, pollutants and dirt to run off into Bayou Casotte.

▶ Failing to contain blowing dust and dirt from dredging and construction areas.

"We're not doing any better," said Barbara Weckesser, a spokeswoman for the Cherokee Concerned Citizens, a watchdog group that has been documenting and raising concerns about pollution from nearby industries.

"The paint issue has slacked up a bit in the cold weather, but the noise is still here, and we still have the dust," Weckesser said. "We're still looking for a buyout."

The group of residents has been seeking assistance from MDEQ, Jackson "The paint issue has slacked up a bit in the cold weather, but the noise is still here, and we still have the dust.We're still looking for a buyout."

Barbara Weckesser

Spokeswoman for the Cherokee Concerned Citizens

County leaders and the Pascagoula City Council.

"Can you do something to protect our health out there?" she asked the Jackson County Board of Supervisors last August.

Chris Wells, a lawyer for the department, said the inspection was prompted in part by residents' complaints.

"I wouldn't necessarily say it was caused by the complaints but the timing of it was maybe precipitated by the complaints," Wells said.

At that time, she noted a neighborhood survey of 97 households (representing 307 adults and children) found that 94 families complained of noises, dust and strong odors from businesses along Industrial

Weckesser plans to go before Pascagoula leaders again in February, she said, because she has more industrial pollution documented and logged.

Fred Nelson, who has lived in Cherokee for nearly 30 years, said he's still having health issues that he believes are linked to poor air quality.

"I'd like to see my health improve," he said. "I've had shortness of breath, and that sandblasting is what's going to be bad because a lot of dust and sand comes over here," he said.

"When it gets on your skin, you can tell it," Nelson said. "You'll be itching and your breathing is hard. And it dries out your skin and nose."

Nelson said he's glad companies such as VT Halter are being held accountable for their mistakes, but the neighborhood is still suffering.

fering.
"We're still getting some bad smells," he said.

"The noise might have improved a little but not much. I'm still hearing loud rumbles. We still have a little paint coming over here too."

The company agreed that it would conduct an engineering study about how to contain sandblasting and painting within 150 days. The company also agreed to complete a building to house blasting and paint activities by June 30.

Halter was already erecting that building as part of a \$35 million project using \$22 million in Halter money and \$13 million in federal Hurricane Katrina recovery money.

In the meantime, Halter pledged to use a sweeper, water truck and vacuum truck to hold down dust and to fully curtain any sand-blasting and painting.

Wessecker, though, said those measures have thus far proved ineffective.

"All of the stuff is still blowing over here," she said. "It's not being stopped."

The Associated Press contributed to this article.

ing SRHS" in an effort love the county-owned pital system "forward in sitive manner."

[think this is a dratic step," Supervisor y Ross said. "I think a step that may cort the ship."

he attempt to get the stees to resign came just week after supervisor lton Harris reappoint-SRHS trustee Ira Polk to other five-year term. Harsaid he trusts Polk, but o elected to support the ve to ask current trustto step down.

The trustees by law can use to step down if they ose to do so.

Prior to the Monday's te, Cumbest said he had lked to Cronier about e appointment as well

his residency. Cronihas homestead exempn in both Alabama and ississippi.

"His primary residence here in Jackson County," ımbest said. "I know he ould be open-minded to ly plans we come up with. hat's the reason I want him ft there."

Cronier voted against the tirement plan's terminaon, Cumbest said.

"If you want to do the ght thing," SRHS retire Phyllis Denmark said, ask him to step down, arry. There's no trust. visors about the failed pen-

we move forward with a pervisors to start publishclean slate."

Ross said he has a few folks in mind for his appointment, assuming the position opens. Still, he admits it may be hard to find a person willing to take the job.

"If I were uninvolved at this time and someone asked me to serve on that board, I would definitely have second thoughts before I said yes just because it's going to be tough problems to solve," he said. "It's going to take leadership and it won't be easy."

Singing River stopped contributing to the pension plan after 2009 without informing employees.

The health system announced in March that it has an \$88 million shortfall. The Board of Trustees voted Nov. 20 to terminate the retirement plan.

Singing River has said it will pay vested pension participants lump sums based on their mandatory contributions, but not the monthly retirement checks they expected for life.

More transparency

Five people spoke during the public comment portion of Monday's meeting. All questioned super-

said "it's appropriate that week: Recently, neask-usaing the board minutes online in their entirety along with any contracts and other documents for residents to gain easy access to the information.

"My opinion is that if y'all had been doing that for the last four or five years, the fact that the (health system). had quit donating money or putting any money in the pension plan fund would have been obvious to anyone who had read the financial audit," he said. "Quite clearly, it shows the money is not being allocated for the pension."

Slater said he spent at least four hours in the Chancery. Clerk's office reviewing the board minutes complete with SRHS's audits that are available in the Chancery Clerk's office in archives. He said most people don't have the time during the day to look through the material as he had done.

"Do you understand why we need transparency in government?" Slater said. "If this information had been available, somebody would have brought it to y'all's attention. Y'all seem to be more worried about being re-elected rather than serving the public."

Anita Lee, Sun Herald staffer, contributed to this report.

and say, 'Go back to kindergarten, Legislature."

SHIPYARD FROM 1A

be precipitated by the complaints," Wells said.

He said sandblasting curtains meant to contain emissions had gaps and holes. Wells said he wasn't sure how long VT Halter had been in violation.

"Things can change pretty rapidly at a facility," Wells

The company agreed that it would conduct an engineering study about how to contain sandblasting and painting within 150 days. The company also agreed to complete a building to house blasting and paint activities by June 30. Halter was already erecting that building as part of a \$35 million project using \$22 million in Halter money and \$13 million in federal Hurricane Katrina recovery money.

In the meantime, Halter pledged to use a sweeper, water truck and vacuum truck to hold down dust and to fully curtain any sandblasting and painting.

Wessecker, though, said those measures have thus far proved ineffective.

"All of the stuff is still blowing over here," she said. "It's not being stopped.

Suzie Sa Managing D Investment A Represen

Audiology

Dr. Vickie G. Cruss CCC-A. FAAA Doctor of Audiology

HEATING &

John Barnes

READ MORE BREAKING NEW

pays \$144K fine over dust, paint

. By JEFF AMY Associated Press

JACKSON — A Pascagoula shipyard that has been a focus of complaints by nearby residents is paying a \$144,545 civil fine for environmental violations including allowing sandblasting particles and paint to become airborne.

VT Halter Marine agreed to pay the fine to the Mississippi Department of Environmental Quality in a November order.

Residents in a subdivision just west of Bayou Casotte say that they're suffering health and property damage from the highly industrialized corridor, which includes the now-shuttered Mississippi Phosphates plant, the Chevron Corp. refinery and the Signal International shipyard.

"My car is covered in overspray," said Barbara Wessecker, a leader of the residents' group. "It's been covering in sandblasting material; it's been covered in everything.

VT Halter did not immediately respond Monday to a request for comment.

The environmental regulator found that the shipyard, owned by Singapore Technologies Engineering, committed a total of 44 violations documented in a May 2014 inspection. Other problems included:

- Improperly storing and labeling paint, solvent and oil.
- Sendinghazardous waste to regular landfills.
- Allowing oil, pollutants and dirt to run off into Bayou Casotte.
- Failing to contain blowing dust and dirt from dredging and construction areas.

Chris Wells, a lawyer for the department, said the inspection was prompted in part by residents' complaints.

"Iwouldn't necessarily say it

JACKSO

mbb:

PASCAGOI ty Board o six remain River Heal ees will re sors work replaceme

Supervis resolution ees they ap fective imi

Two mer ees, board berg and L afternoon they inten learned ab lution afte them had s

About 2 ed Monda ed when s for the resi

Board o sors presk Cumbest w the resolut he support ee, Allen C

"I know heart is," said, thou ed Cronier asked to do

Morris Si the board,: cause he is law requin idents" of] sor John Mi to the posit blames SRI for not tell step down from Jacks

Supervis duced the it was the " "right" tim Barbara Weckeser Cherokee Concerned Citizens President 1502 Cherokee St. Pascagoula, MS 39581

August 27, 2014

Bryan Collins, PE Mississippi Department of Environmental Quality Permit Board P.O. Box 2261 Jackson, MS 39225

Dear Bryan,

On behalf of Cherokee Concerned Citizens, I, Barbara Weckesser, would like to submit the enclosed community comments regarding the Title V permit renewal for Chevron Cogenerating Plant, permit number 1280-00048.

Sincerely,

Barbara Weckesser

For what good it does to comment

you never here back or know

if it ever was awarded for a

new permit, Submitting these

as proof on all Companies.

Check out last page.

Jold again yester day by

Nr. at Anging River C.

Jo get better you need to

Move. I don't live in a box

nove.

CCC Community Comments Chevron Cogenerating Plant Title V Permit Number 1280-00048

Health Concerns

HAP

We are concerned about coke pile located on site. What monitoring is done to ensure that coke particles do not travel into our neighborhood? Residents in our community have seen coke particles on their property. Wes Smith from Mississippi Phosphates has stated that he his patio table was covered in coke. He lives in Del Mas Estates, the neighborhood located further away from industry than ours. We would like the permit to include reporting and monitoring efforts to ensure these dangerous particles are not released in the air.

Odors

We have been smelling strong odors coming from facilities near our neighborhood. One of the representatives from Signal International was recently with Barbara Weckesser investigating the dust that accumulates on several of our properties. While the representative was at Barbara's house, he smelled one of the smells we have been smelling and told Barbara that it is likely gas from Chevron. We are concerned about this smell because many of the residents have been experiencing symptoms related to exposure to these odors. These include eyes, nose and throat irritation, headaches, dizziness, nausea, vomiting, confusion and breathing difficulties. We are concerned that the current reporting and monitoring efforts are not effectively keeping our community safe from this toxic odor.

Accumulated Affects

Expansion proposed by LNG

We are concerned about the LNG expansion will lead to an expansion of Chevron Cogenerating Plant current activities. We believe their current activities may be a potential threat to our health and thus, believe we cannot tolerate any further expansion of activities until our health concerns are addressed. We do not support any authorization of expanded activities for any facility, including Chevron Cogenerating Plant.

Monitoring

Identifying the cause of our health problems

Many of our residents are experiencing health problems and need to identify the cause. Because of the number of Title V facilities in our area, it is difficult to determine which facility or facilities is the cause. Mississippi Phosphates sent investigators to determine if SO2 was one of the toxins in our neighborhood. Even though the smell and mist were present their monitors did not register any SO2. Since then we have learned the following could be one reason: Ted Zellers, a chemistry and environmental health sciences professor at the University of Michigan who studies chemical sensing, says that while several different polymers can be used to detect different chemicals, if more than one or two

chemicals are present simultaneously the sensor's ability to detect those chemicals falls "precipitously." "If three are present, it is highly unlikely that they can tell what is there," he says. We include this in our comments because we have concerns about the equipment the facilities in our are using to measure the toxins. We would like MDEQ to provide our community with the assurance that the monitoring and reporting for all facilities, including Chevron Cogenerating Plant, will be sufficient for our neighborhood to determine which industry and/or toxin is making us sick.



Signal International

Community Open Forum
Pascagoula Senior Center
February 17, 2014

Now another Company Still Dame problems. Halter Marine Offshore Inc. Pollution of problems ptill Corning in on us. Barbara Weckessen



Community Open Forum Pascagoula Senior Center February 17, 2014

Signal International, LLC

Signal International – Pascgoula East Yard, located on 95 acres at the end of Bayou Casotte Parkway, is a metals fabrication and service yard that attends to the needs of oil rigs and other marine interests. Signal's service to it's customers may include, amoung others, the replacement of steel structures, rig interior work, pipe work, and coatings. The operations utilize cranes, forklifts, trucks and other equipment to fulfill the needs of the customer. During these operations a relatively minimal amount of noise, odors and dust are produced. Following is a synopsis of our Best Management Practices (BMP) to minimize those types of impact mentioned above:

Noise

Noises produced that might be loud enough to be heard at a distance would inloude our yard wide alert horn, equipment safety horns, and dropping of large steel structures. The alert horn sounds at the beginning of work shifts, breaks and lunch. These horns may operate 24 hours a day. The equipment safety horns operate when equipment movement might pose a safety issue with workers. Large steel structures, while handled daily, are almost never dropped. This source of noise would be very infrequent.



Odors

Odors that might make it outside our perimeter would be limited to products that are used in the coating operations. Generally, most coating operations occur within containment that limits the migration of those products. The solvents used in coating which are the most likely to cause an odor are far below the harmful level eventhough the nose might detect a slight odor after the solvent(s) have migrated some distance. No other operations produce any products that might produce an odor off-site.

Dust

Dust has the potential to migrate outside of our perimeter; however, Signal has in place multiple Best Management Practices that mitigate the production and migration of dust and particulate matter.

Vehicular and equipment traffic has the potential to creat air borne dust. Signal consistently waters all roadways to reduce or eliminate dust from traffic. Signal is highly motivated to reduce road dust for the safety and health of our employees and our neighbors.

Blasting occurs on the oil rigs, in our blast house and in the blast yard located at the furtherest southern reaches of the yard. Where practical, items to be blasted are contained (BMP) to prevent dust from becoming air borne and escape our perimeter. In addition Signal has selected high pressure water blasting where practicable which eliminates the production of air borne dust.



A Marine & Fabrication Company



Environmental, Health and Safety Policy

Signal International is committed to efficiently manufacture, distribute and service high quality products in a manner that prevents pollution; conserves, recovers, recycles and reuses resources; and provides for its employees, a safe, healthful and drug-free work place. Furthermore, Signal International will conduct business operations in a manner in order to maintain, and where possible exceed, compliance with applicable local, state and federal EHS regulatory law.

The accomplishment of this policy requires continuous management leadership and full involvement of all Signal International employees. The following guiding principles are provided to ensure all Signal International employees, vendors, sub-contractors, customers, and all other entities that conduct activities within a Signal International facility, have an established course of action so that the decision making processes that govern daily operations are consistent with the Signal International commitment to Environmental, Health and Safety:

*The integration of Environmental, Health and Safety into the daily business and work decisions and to continuously strive to improve EHS performance results

"The empowerment of management, supervision, our employees, vendors, sub-contractors and our customers to prevent activities that might be conducted in an unsafe and/or an environmentally unfriendly manner, and additionally, bringing these activities to the attention of the responsible Signal International authority

*To provide effective management to minimize or eliminate workplace exposures, ensure environmental compliance and to assess performance via EHS staff guidance in concert with employee assistance

*To provide the necessary tools, equipment and appropriate training and/or information so that the Signal International employee may acquire the necessary knowledge and skills to work in a safe, drug-free and environmentally responsible manner

*To hold all Signal International employees accountable for the safety and well-being of their fellow employees and the environment in which they work (in). Moreover to encourage all employees to actively participate in the continuous improvements of the Signal International EHS efforts

*Signal International mandates that all entities, e.g., sub-contractors, vendor's, customer's, etc., and their on-site employees, attain the same level of accountability and performance regarding a commitment to compliance with environmental, health and safety matters as that required of the Signal International employee

Richard L. Marier

Richard J. Marler

Chairman of the Board, President & CEO

PO-BOS-002 (Rev: 3/2011)



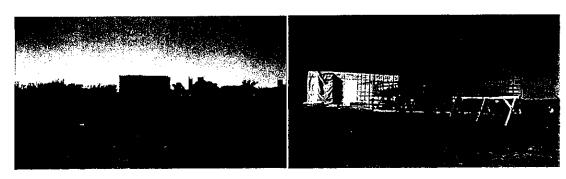
A Marine & Fabrication Company

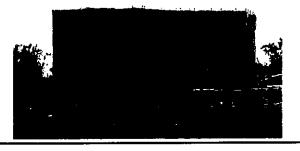
Samples of Best Mangement Practices during Blasting/Painting and Other Operations

Signal International – East Yard

Containment Examples

Containment prior to blasting/painting in blast yard

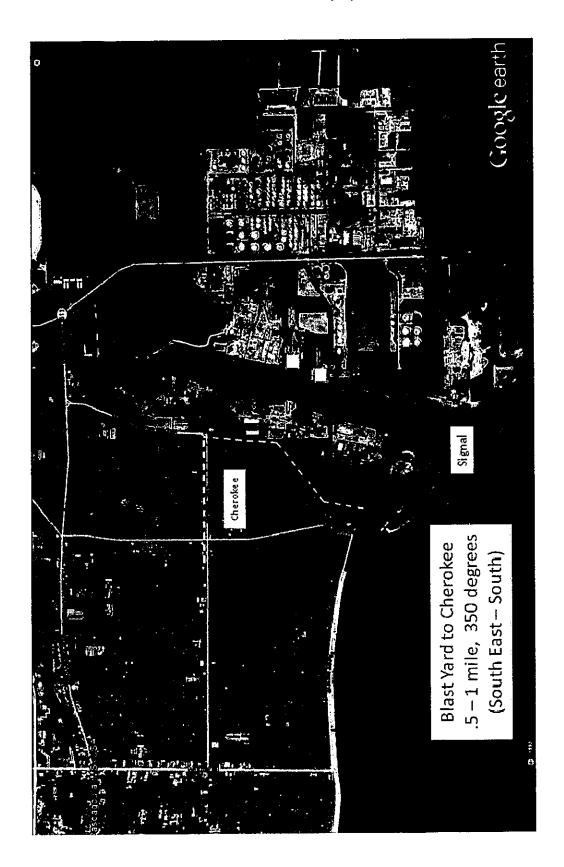




Containment prior to blasting/painting of oil rigs







APPENDIX B

Comments from Ms. Crosslin

Carla Brown

From: Adams, Yolanda <Adams.Yolanda@epa.gov>

Sent: Friday, June 24, 2022 10:23 AM

To: Carla Brown

Cc: Diaz-Galarza, Gloria

Subject: FW: Halter Marine Offshore Title V Permit

Attachments: HMO Permit Comments.pdf; Chevron Products (MS) Petition Decision Letter (1).pdf;

Mississippi Health Survey (1) (1).pdf; Soil Sample 4.30.14.pdf; Pascagoula CC

Signatures.jpg; 22-102-0027PDFreport_far002-003.PDF; IMG-2592.jpg; IMG-2602.jpg;

IMG-2608.jpg; dustwipe.110416.pdf

This Message Is From an External Sender

This message came from outside your organization.

Hi Carla,

Can you confirm whether you received the comments referenced below from Jennifer Crosslin?

Thanks,

Yolanda

From: Cherokee Concerned Citizens <citizensbuyout@gmail.com>

Sent: Wednesday, June 22, 2022 7:52 PM

To: Fortin, Kelly <Fortin.Kelly@epa.gov>; Diaz-Galarza, Gloria <diaz-galarza.gloria@epa.gov>; Adams, Yolanda

<Adams.Yolanda@epa.gov>

Subject: Fwd: Halter Marine Offshore Title V Permit

Hi,

The Cherokee Concerned Citizens sent the following email to MDEQ as part of the public comment period for Halter Marine Offshore Title V permit. We never received confirmation of our comments and were denied a public hearing.

I am reaching out to you today to learn where we are in the process. Is the permit still under EPA review? Has it been approved? And if so, when does the 60 day petition date begin and end?

We look forward to hearing from you!

Jennifer Crosslin

----- Forwarded message ------

From: Cherokee Concerned Citizens < citizensbuyout@gmail.com>

Date: Fri, Apr 22, 2022 at 4:24 PM

Subject: Halter Marine Offshore Title V Permit To: Carla Brown < CBROWN@mdeq.ms.gov>

Cc: <disneygirlbarb@att.net>, Cherokee Concerned Citizens <<u>citizensbuyout@gmail.com</u>>, <<u>nelsonbsweet@yahoo.com</u>>

Hi Carla,

The Cherokee Concerned Citizens submits the attached documents as part of Halter Marine Offshore Title V permit renewal.

Please confirm receipt of this email.

Thank you,

Jennifer Crosslin

MDEQ Environmental Permits Division
Attn: Carla Brown
PO Box 2261
Jackson, MS 39225
cbrown@mdeq.gov

RE: Air Title V Operating Permit for Halter Marine Offshore Pascagoula Operations, Permit # 1280-00118

Dear Carla Brown,

I am submitting the following comments on behalf of the Cherokee Concerned Citizens regarding the Title V Air permit for Halter Marine Offshore.

The signature of Lim Nian Hua for the Responsible Official is missing in the permit application. While legally, STE is able to operate two facilities with two different permits, it is very likely that VT Halter & Halter Marine Offshore operate closely on the same contracted projects. It is concerning to the us that the company can avoid additional pollutants limits simply by setting up a separate board for which the relationship between the two cannot truly be investigated. Regardless, at the very least, we expect Responsible Officials to sign documents to demonstrate compliance with the law as two distinct companies.

MDEQ should require continuous community air monitoring for VOC and PM to ensure compliance with 11 Miss. Admin. Code Pt. 2, R. 1.3.C. "For the entire facility, the permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution."

- We submited the signatures of 30 residents all affirming that they are still getting "dust" on their property to MDEQ as part of our public comments for VT Halter's permit. Because we cannot differentiate between the two companies, VT Halter and Halter Marine Offshore, we submit the signatures again as evidence that one or both of the facilities are violating the above requirement. It should not be a requirement that this evidence also have been reported to MDEQ reporting system as implied by the agency's response when submitted as part of VT Halter's permit.
- Determination for injury to humans living near these industries requires local community air monitoring.
 As explained to us by the Agency for Toxic Disease Registery (ATSDR), continous local community air
 monitoring is the best way to make any determination of health impacts of industrial pollution. The
 opacity tests and product and usage monitoring and reporting requirements fail to make this
 determination. Additionally, the VOC test that MDEQ often offers up as evidence that facilities are not in
 violation is inconclusive at best.
- We also submit the health study conducted in partnership with Dr. Wilma Subra that supports the community's assertion that industrial activity is in fact threatening the health of nearby residents.

- Attached is a photo taken on Industrial Park Road on April 9th, 2022 after 5:00 pm that shows a cloud of fugitive emissions that may be coming from Halter Marine Offshore. If you zoom in where the cranes, you should be able to see the cloud that the person taking the photo could see with their eyes. We have also attached three other photos that illustrate the pollution in the area. One photo taken on March 17th from a resident that lives on Seminole in Cherokee subdivision. The entire sky is not in full view of the photo but if it were you would see that it is clear only one dark cloud. These clouds are commonly see in the neighborhood. The other two photos are images taken on April 9th. You can see a ring of dark clouds in the sky. Luckily, the wind was blowing the opposite direction of the neighborhood. The two pictures demonstrate, however, that the source of the dark clouds is actually pollution surrounding all the nearby facilities.
- We also submit the following analysis of five wipe samples taken at five different locations in Cherokee subdivision on April 9th, 2022. All five samples detected 22 out of 22 heavy metals and the ratios were relatively consistent across all five locations, showing similar levels of calcium, iron, magnesium, zinc, and aluminum. They are also consistent with a dust wipe sample taken in 2016 (also attached). Elevated levels of aluminum, calcium, iron, and magnesium have also been reported in the soil. (see attached soil sample by MS State Lab)

MDEQ should also require Halter Marine Offshore to build a sandblasting facility like that required of VT Halter. The evidence presented above suggest that the company is releasing fugitive emissions that compromise the health of residents. At the very least, MDEQ should launch a full investigation. Additionally, MDEQ could be proactive in requiring the company to also have a enclosed sandblasting facility as VT Halter does.

In closing, we hope to have the opportunity to express our concerns and present our evidence before the permit board during the public hearing that we have requested.

Sincerely,

Jennifer Crosslin
Cherokee Concerned Citizens
citizensbuyout@gmail.com



Agency for Toxic Substances and Disease Registry Atlanta GA 30333

December 16, 2021

Transmitted via email
Jennifer Crosslin
President
Cherokee Concerned Citizens
1502 Cherokee Street
Pascagoula, Mississippi 39581
jencrosslin@gmail.com

Dear Ms. Crosslin:

The Agency for Toxic Substances and Disease Registry (ATSDR) has completed the review of your May 13, 2020, petition request. You requested for ATSDR to evaluate the public health concerns for the Cherokee Subdivision, Pascagoula, MS, associated with toxic releases originating from the Chevron Products Corporation located at 250 Industrial Rd, Pascagoula, Mississippi, and the Mississippi Power Cogenerating Plant collocated on the Chevron property.

After careful evaluation, ATSDR has decided to not conduct public health activities in response to your petition request because we are unable to meaningfully evaluate the community's exposure with available data. The remainder of this letter outlines the decision process that ATSDR used to reach this outcome.

ATSDR's Petition Program – established by Congress in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund) – evaluates all petition requests according to specific decision criteria. The decision criteria include relevance to ATSDR's mission, whether data are available for analysis, and public health priority.

An important component of ATSDR's public health assessment process is the evaluation of environmental data. Environmental data are used to conduct exposure pathways analyses, which allow us to determine whether community members have been or are currently being exposed to hazardous substances released into the environment. Generally, we do not collect our own environmental sampling data, but we review information provided by other federal, tribal, state government agencies, potentially responsible parties, or other third parties.

ATSDR reviewed the available environmental data collected from the Cherokee Subdivision and the surrounding area. The data included analytical results for air, soil, surface wipes, dust, and water samples. While available data revealed the presence of contaminants in some environmental media, the environmental sampling data are

insufficient to fully characterize exposures and determine potential health impacts to the community. To conduct an exposure assessment and a meaningful public health evaluation for the Cherokee community, relevant and sufficient community-based air data are needed. Therefore, ATSDR recommends additional community-based air sampling data, for an extended period of time, to account for potential seasonal or operational variations in exposure levels.

ATSDR reviewed the health survey completed by residents of the Cherokee Subdivision. The results of the health survey were used to understand the nature and scope of health concerns expressed by members of the Cherokee community.

In our capacity as a health advisory agency, ATSDR is available to provide technical assistance to any federal, state, or local agency, or others, on how best to collect community-based air monitoring data that could be used to support a future public health evaluation. If appropriate air quality data become available, ATSDR will evaluate the results to determine whether pollutants in the community represent a public health threat to the nearby communities.

ATSDR will share with EPA and the Mississippi Department of Environmental Quality (MSDEQ) of the need for additional air sampling data. We are available to work with EPA, MSDEQ, or any other agency to fill this critical data gap.

If you have any questions about our evaluation of your petition request, please contact Ms. Leann Bing, Acting Region 4 Director, at 404-562-1784 or kgb0@cdc.gov.

Sincerely,

Elizabeth Irvin, Ph.D.

Director

Office of Community Health & Hazard Assessment ATSDR

CC:

L Bing, ATSDR Region 4

Pascagoula Health Survey

By Wilma Subra subracom@aol.com

Louisiana Environmental Action Network

Date: January 23, 2021

The Health Survey was completed by residents of Cherokee Subdivision in Pascagoula, Jackson County, Mississippi. Cherokee Subdivision consist of 150 houses, with 20 empty houses.

A total of 80 individuals were surveyed, 54% female, 44% male and 2% unidentified. The ages ranged from 3 to 80 years old. The ages by sex ranged as follows:

Age	Male	Female
0-10	4	3
11-20	6	7
21-30	5	3
31-40	3	2
41-50	3	5
51-60	8	8
61-70	4	9
71-80	2	5

One individual sex and one individual age were unknown.

Years Community Members Lived at Current Address

Community members lived at their current addresses from 6 months to 52 years. The majority of community members surveyed lived in their current homes from 0 to 20 years.

Years	Surveyed Individuals
0-5 years	17
6-10 years	21
11-20 years	18
21-30 years	14
31-40 years	5
41-50 years	1
51-60 years	1
Unknown	3

Smoking History

85% of those surveyed never smoked

15% of those surveyed smoked

Those that smoked, smoked from 0.5 to 1 pack of cigarette a day, and have smoked from 4 years to 31 years with an average of 25 years of smoking history.

Seventeen (17) surveyed individuals smoked in the past from six months to 45 years, with an average of 18 years smoking in the past.

Occupations of Surveyed Individuals

Electrical Engineer

Design Specialist

Machine Operator

Dragline Operator

Pipe Welder

Ship Fitter

Shipyard Welder

Construction

Refinery Worker

Plummer

US Postal Service

Military Service

Realtor

School Administrator

Self Employed

Business Owner

Registered Nurse

Health Worker

Digestive Health

Medical Field

Miss. Sun Herald

Marketing Manager

Retail Sales

Nursery

Vending Cashier Waitress

Walmart

La Font Inn

McDonalds

Southern Belle

Raising Cane

Harrahs

Jerry Lee Store

Dollar General

Larry's BBQ

Seamstress

Housewife

Retired

Student

Healthy Versus Sick

52.5 % of surveyed individuals considered themselves Healthy

47.5 % of surveyed individuals considered themselves Sick

The surveyed individuals reported being sick from 0 to 30 days per month with an average of being sick 9.3 days per month.

Ten surveyed individuals reported being sick as frequently as every day per month.

Experience Odors

96% of the individuals surveyed experienced odors

4% of the individuals surveyed did not experience odors

How Frequently Are Odors Experienced

Two to 30 days per month, with an average of 22.6 days per month.

Community Members Description of Odors

Crude Oil - 21 individuals

Gas – 18 individuals

Sweet Smell – 15individuals

Sulphur – 14 individuals

Rotten Eggs – 14 individuals

Acid Smell – 13 individuals

Ammonia – 7 individuals

Chemical Smell – 6 individuals

Paint – 5 individuals

Burnt Oil Smell - 5 individuals

Fish Rotten Plant – 4 individuals

Welding Fumes – 4 individuals

Deadly - 4 individuals

Rubber - 3 individuals

Perfume – 2 individuals

Unknown Chemical – 2 individuals

Sour Smell – 2 individuals

Bad Odor – 2 individuals

Sand Blasting – 2 individuals

Diesel – 1 individual

Unpleasant Odor – 1 individual

Sewage – 1 individual

Cat Food – 1 individual

Community Members Health Impacts Associated With Odors

Health Impacts	Incidence
Sinus Problems	87%
Skin Rashes/Burning	73%
Burning Eyes	39%
Headaches	38%
Shortness of Breath	31%
Allergies	19%
Nausea	18%
Diarrhea	14%

Eye Irritation	13%
Dizziness	11%
Throat Irritation	11%
Breathing Problems	9%
Itchy Eyes	9%
Irritated Skin	4%
Runny Nose	4%
Sore Throat	4%
Upset Stomach	3%
Stuffy Nose	3%
Chest Tightness	3%
Cough	3%
Sneezing	1%
Eyes Watering	1%
Dry Throat	1%
Head Cold	1%
Vomiting	1%
Irritated Tear Ducks	1%
Congestion	1%
Reflux	1%

Health Impacts Experienced by Community Members Not Associated with Odors

Health Impacts	Incidence
Sinus/Respiratory	
Sinus Problems	88%
Shortness of Breath	31%
Breathing Problems	9%
Asthma	5%
Wheezing	4%
Chest Tightness	3%
Coughing	1%
Congestion	1%
COPD	1%

Ears/Nose/Throat

Ringing in Ears	23%
Loss of Sense of Smell	14%
Hearing Loss	14%
Persistent Hoarseness	14%
Discoloration of Teeth	6%
Metallic Taste on Cough	6%
Wheezing	4%
Nasal Irritation	4%
Sore Throat	4%
Deafness	3%
Sores in Mouth	1%
Frequent Nose Bleeds	1%

Skin

Eczema	6%
Boils	6%
Discolored Skin	1%
Skin Peeling	1%
Pustules on Skin	1%
Thickening of Skin	1%
Yellowing of Skin	1%
Burns of Skin	1%

Digestive System

Abdominal Pain	36%
Indigestion	9%
Muscle Weakness	8%
Change in Bowel Habits	4%
Loss of Sense of Taste	3%
Bowel Problems	1%
Weight Loss	1%
Blood in Stools	1%
Diverticulosis	1%
Gall Bladder	1%
Hernia	1%

Urinary

Frequent Urination Difficulty in Starting to Urinate Blood in Urine Gout Discolored Urine Sugar in Urine Urinary Tract Infection Bladder Disease	28% 8% 6% 6% 4% 1% 1%
Neurological	
Forgetfulness Loss of Memory Amnesia Weakness of Hands Tingling in Hands Staggering Spelling Difficulties Stumbling Trembling Hands Dizziness Falling Difficulty Concentrating Seizures Trembling in Arms Learning Problems	19% 14% 9% 6% 5% 4% 4% 2% 2% 1% 1% 1%
Pancreas	
Diabetes	1%
Behavioral Issues	
Increase Fatigue Sleep Disturbance Sleep Disorders Tension Frequent Irritability Depression Loss of Sleep	41% 23% 7% 6% 5% 4% 2%

Loss of Sexual Drive Fainting Extreme Exhaustion Difficulty Carrying Out Actions	2% 2% 1% 1%
Blood Disorders	
Bleeding from Rectum Bleeding Ulcers	1% 1%

Cancers

Skin Cancer	4%
Lung Cancer	4%
Abnormal Mammogram	1%
Bladder Cancer	1%
Breast Cancer	1%
Cervical	1%
Chronic Myeloid Leukemia	1%
Fibromyalgia	1%
Mesothelioma	1%
Prostate Cancer	1%
Thyroid	1%

Community Members Surveyed Identified Industrial Sources Where Odors Were Coming From

VT Halter Marine – 40%

Ingalls Shipyard – 34%

Chevron Refinery – 31%

Signal Shipyard – 31%

Mississippi Phosphate – 29%

First Chemical – 28%

Facilities Releasing Sources of Pollution into the Air, Identified by Surveyed Community Members

VT Halter Marine – 70%

Chevron Refinery – 69%

First Chemical- 49%

Mississippi Phosphate- 43 %

Signal Shipyard – 43 %

Ingalls Shipyard – 5%

Industrial Facilities

Chevron Pascagoula Refinery

The refinery began operations in 1963. Over the years of operation, the facility added various units to increase production capacity, process high sulfur crude, produce low sulfur gasoline and diesel and in 2020 streamlined and reduced production to compensate for less demand for products.

First Chemical

First Chemical was established in 1967. The facility manufactures aniline, nitrobenzene and NDPA lube antioxidant. In July 2020, First Chemical announced it would close the plant at the end of 2020.

Ingalls Shipyard

Ingalls Shipyard was founded in 1938 and has been in operation for 82 years. It is the largest employer in Mississippi. It is the largest supplier of US Navy Surface Combatants and has built nearly 70% of the US Navy Fleet of warships.

Mississippi Phosphate

The facility was founded in the late 1950's. It manufactured Diammonium Phosphate fertilizer from the late 1950's through December 2014 when it declared bankruptcy. At that time more than 700 million gallons of acidic, nutrient-rich wastewater was stored at the facility. The Environmental Protection Agency designated the site as a Superfund site and is addressing the contamination situation at the site. In July 2020, EPA completed Phase One of the first of three phases to close the site.

Signal Shipyard

Signal Shipyard performs ship building and repairs on platforms and barges.

VT Halter Marine

The facility was founded in 2002 and designs and constructs ship for public and private clients, including the Department of Defense. On January 7, 2021, the company announced they will build the first Polar Security Cutter for the US Coast Guard. It will be the next generation of heavy icebreakers to be used in Antarctica.

Environmental Protection Agency Toxic Release Inventory – 2019

The state of Mississippi ranked 12 out of 56 states and territories in the United States, in total releases per square mile in 2019.

Air Emissions - 906.4 thousand pounds

Ammonia	29%
Hydrogen Cyanide	10%
Toluene	7%
n-Butyl Alcohol	5%
n-Hexane	5%
Others	44%

Releases to Water – 202.2 thousand pounds

Nitrate Compounds	84%
Ethylene Glycol	5%
Vanadium	3%
Zinc Compounds	3%
Ammonia	2%
Others	2%

Jackson County Toxic Release Inventory - 2019

Air Emissions – 735.1 thousand pounds

Ammonia	18%
Hydrogen Cyanide	13%
Toluene	9%
n-Butyl Alcohol	6%
n-Hexane	6%
Others	48%

Releases to Water – 196.1 thousand pounds

Nitrate	86%
Ethylene Glycol	6%
Vanadium Compounds	4%
Zinc Compounds	1%
Methanol	1%
Others	2%

Chemicals Released into the Air from Industrial Facilities That Surveyed Community Members Identified as Being Sources of Odor Emissions and Sources of Pollution into the Air

- 2-Methoxyethanol
- 2-Nitrophenol
- 4-Nitrophenol
- 1,2-Dichloroethane
- 1,2-Dibromomethane

- 1,2-Dichloropropane
- 1,3-Butadiene
- 2,4-Diamioanisole
- 2,4-Dimethylphenol
- 2,4-Dinitrophenol
- 2,4-Dinitrotoluene
- 2,6-Dinitrotoluene
- 4,6-Dinitro-o-cresol
- 2,6-Xylidine
- 1,2,4-Trimethylbenzene
- 1,1,1-Trichloroethane

Acetophenone

Aluminum Oxide

Ammonia

Aniline

Barium Compound

Benzene

Benzo(g,h i)Perylene

Biphenyl

Carbon Disulfide

Carbonyl Sulfide

Certain Glycol Ethers

Chlorine

Cobalt Compounds

Copper Compounds

Chromium Compounds

Cresol

Cyclohexane

Cumene

Dichloromethane

Diethanolamine

Dioxin and Dioxin Like Compounds

Diphenylamine

Ethylbenzene

Ethylene

Formaldehyde

Hydrochloric Acid

Hydrogen Cyanide

Hydrogen Sulfide

Lead

Manganese

Manganese Compounds

Methanol

Methyl Ethyl Ketone

Mercury

Naphthalene

n-Butyl Alcohol

Nickel Compounds

Nitrate

Nitric Acid

Nitrobenzene

n-Hexane

o-Toluidine

Phenol

Polycyclic Aromatic Hydrocarbons

Propylene

Styrene

Toluene

Tert-Butyl Alcohol

Toluene

Vanadium

m,p-Xylene

o-Xylene

Zinc

Zinc Compounds

Health Impacts of Chemicals Released into the Air from Industrial Facilities That Surveyed Community Members Identified as Being Sources of Odor Emissions and Sources of Pollution into the Air

Acute Health Impacts

Irritation to the skin, eyes, nose, throat, lungs

Irritate and Burn eyes, skin, throat, nose

Causes shortness of breath, coughing, wheezing, headaches, dizziness, lightheadedness, bronchitis, nausea, vomiting, diarrhea, weakness.

Irregular heart beat, fatigue, affects concentration, memory, muscle cramps, loss of coordination, loss of memory, confusion, impacts to nervous system, passing out, slowed reflexes, rashes, itching, eye damage, pulmonary edema, weakness in hands and feet.

Chronic Health Impacts

- 2-Methoxyethanol May be a Teratogen in humans since it has been shown to be a Teratogen in animals. May damage the liver and kidneys.
- 2-Nitrophenol May damage liver. May affect nervous system.
- 4-Nitrophenol High or repeated exposure may affect nervous system.
- 1,2-Dichloroethane May be a Carcinogen in humans, shown to cause cancer of the blood vessel, lung, breast in animals. May affect the liver and kidneys.
- 1,2-Dichloroethane May be a Carcinogen in humans since it has been shown to cause blood vessel, lung, breast and other types of cancers in animals. May damage the liver and kidneys. Effects may include reduced memory and concentration, personality changes, reduced coordination, effects on nerves supplying internal organs.

- 1,2-Dichloropropane Limited evidence it can cause cancer in animals. It may cause cancer of the liver. Repeated exposure may damage the liver and kidneys. May affect the nervous system.
- 1,3-Butadiene Probable Carcinogen in humans. Some evidence it causes lymph, breast, uterine, lung, heart and skin cancer in animals.
- 2,4-Diaminoanisole Maybe a Carcinogen in humans since it causes cancer of the thyroid in animals. Limited evidence it is a Teratogen in animals. Treat as a possible Teratogen in humans. May damage the liver and affect the thyroid.
- 2,4-Dimethylpheol High or repeated exposure may affect the liver and kidneys.
- 2,4-Dinitrophenol May damage liver, kidneys, nervous system and blood cells.
- 2,4-Dinitrotoluene May be a Carcinogen in humans. Causes mammary and skin cancer in animals. May damage male (testes) reproductive system in animals.
- 2,6-Dinitrotoluene May be a Carcinogen in humans. Shown to cause liver cancer in animals. May damage male reproductive system (decrease sperm count) and affect male fertility in animals.
- 4,6-Dinitro-o-cresol May cause mutations (genetic changes). Limited evidence may decrease fertility in males. May damage liver and kidneys and blood cells.
- 2,6-Xylidine May be a Carcinogen in humans since it has been shown to cause cancer of the nose and liver in animals. May damage the liver.
- 1,2,4-Trimethylbenzene May cause changes to blood cells and affect blood clotting ability.

Acetophenone – May affect the nervous system.

Aniline – Carcinogen in humans, causes spleen cancer in animals.

Barium – May damage the kidneys.

Benzene – Carcinogen in humans, causes leukemia, should be treated as a possible Teratogen, repeated exposure can cause aplastic anemia.

Carbon Disulfide – May be a Teratogen in humans since it is a Teratogen in animals. It decreases fertility in men and women, causing sperm abnormalities and spontaneous abortions.

Methyl Ethyl Ketone – Limited evidence may be a Teratogen in animals, damage to nervous system, may affect the brain.

Cobalt Compounds – Carcinogen in humans since it has been known to cause cancer of the muscle of animals. May damage male reproductive system (decrease in sperm count).

Copper Compounds – May decrease fertility in males and females.

Cresol – May damage the liver and kidneys.

Cyclohexane – May damage liver and kidneys.

Cumene – May damage liver and kidneys.

Diethanolamine – Limited evidence may damage male reproductive system (decrease sperm count) in animals. May affect the liver and kidneys.

Diphenylamine – May damage developing fetus. May affect bladder. May affect liver.

Ethylbenzene – May be a Carcinogen in humans since it has been shown to causes cancer of the kidneys, testes, lung and liver in animals. There is limited evidence that it is a Teratogen in animals. Treat as a possible Teratogen in humans. It may damage the developing fetus and may affect male and female fertility.

Formaldehyde – Causes cancer in humans. Causes cancer of the nasopharynx and leukemia. Limited evidence may damage the developing fetus and affect female fertility.

Hydrogen Sulfide – Limited evidence causes spontaneous abortions.

Lead – Probable Carcinogen in humans. Some evidence causes lung, stomach, brain and kidney cancer in humans. Shown to cause kidney cancer in animals. A Teratogen in humans since it is a Teratogen in animals. Decreases fertility in males and females and damages developing fetus and the testes.

Methyl Ethyl Ketone – Limited evidence it is a Teratogen in animals. Treat as a possible Teratogen in humans.

Methylene Chloride – May be a Carcinogen in humans. Shown to cause liver and lung cancer in animals. Limited evidence causes spontaneous abortions. May damage the liver and affect the kidneys.

Mercury – Limited evidence may cause an increase in spontaneous abortions, menstrual disorders in expose women. Limited evidence may affect male fertility. May damage developing fetus in animals.

Naphthalene – Probable Carcinogen in humans. Evidence causes cancer of the larynx and intestines in humans. Known to cause nasal and lung cancer in animals. Limited evidence may damage developing fetus.

n-Butyl Alcohol – Limited evidence it is a Teratogen in animals, treat as a possible Teratogen in humas. May damage liver and kidneys.

Nickel Compounds – Probable Carcinogen in humans. Evidence it causes lung cancer in humans. It has been suspected to cause lung cancer in animals.

Nitrobenzene – May be a Carcinogen in humans since it has been shown to cause lung, thyroid, liver and kidney cancer in animals. May damage testes (male reproductive organ). May damage the liver and affect blood cells.

n-Hexane – May damage testes (male reproductive organ).

o-Toluidine – Probable Carcinogen in humans. Shown to cause bladder and liver cancer in animals.

Phenol – A mutagen. Limited evidence may damage the developing fetus in animals.

Styrene – May be a Carcinogen in humans. Shown to cause lung cancer in animals.

Toluene – May be a Teratogen in humans, since it is a Teratogen in animals. May damage developing fetus. May cause liver, kidney and brain damage.

Vanadium – Limited evidence may damage the male reproductive system in animals. May damage the kidneys.

Xylene – May damage developing fetus. May damage liver and kidneys.

Zinc – Appears to affect the male reproductive system (including sperm count).

Summary

A total of 70 toxic industrial chemicals (organics, inorganics and heavy metals) have been reported to the regulatory agencies by the industrial facilities in the Pascagoula area, as being released into the air. The chemicals are reported to the Environmental Protection Agency and the Mississippi Department of Environmental Quality as part of the Toxic Release Inventory and air permitting requirements.

Many other industrial chemicals are not required to be reported to the regulatory agencies, but are released by the industrial facilities into the air.

The acute (short term exposure) and chronic (long term exposure) health impacts associated with the 70 chemicals released by the industrial facilities into the air, match the health impacts reported by community members in the survey as a result of exposure to odor events and in addition to the odor events.

The cumulative impacts to community members inhaling the chemicals released into the air in the area, add to the negative health impacts experienced by community members.



Report of Analysis

Mississippi State Chemical Laboratory PO Box CR Mississippi State, Mississippi 39762 Dr. Ashli Brown State Chemist

Phone 662-325-3428 Fax 662-325-7807 mscl.msstate.edu

For: Barbara Weckesser

Attn:

Report Date:

4/30/2014

Client Sample ID: Back Lot

PO#

Lab Sample ID:

140410001-001

<u>lest</u>			
Aluminum	Sample Classification	<u>Results</u>	Units
Beryllium	IAS Misc.	7200	mg/kg
Cadmium		<0.1	mg/kg
Calcium		0.23	mg/kg
Iron		3400	mg/kg
Magnesium		4800	mg/kg
Manganese		630	mg/kg
pH		13	mg/kg
*		6.0	SU
Potassium		23	mg/kg
Titanium		29	mg/kg

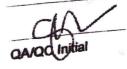
Client Sample ID:

PO#

Lab Sample ID:

140410001-002

Test	Sample Classification	<u>Results</u>	<u>Units</u>
Aluminum	IAS Misc.	5300	mg/kg
Beryllium		<0.1	mg/kg
Cadmium		0.22	mg/kg
Calcium		3500	mg/kg
iron		4100	mg/kg
Magnesium		640	mg/kg
Manganese		24	mg/kg
-		6	SU
Н		28	mg/kg
Potassium		36	mg/kg
itanium			





4/22/2022

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula, MS, 39581

Ref: Analytical Testing

Lab Report Number: 22-102-0027

Client Project Description: Metals Analysis

Dear Ms. Jennifer Crosslin:

Waypoint Analytical Mississippi, Inc. received sample(s) on 4/12/2022 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2021) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an asreceived basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Brian Herrington Technical Director

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.





Certification Summary

Laboratory ID: WP MTN: Waypoint Analytical, LLC., Memphis, TN

State	Program	Lab ID	Expiration Date
Alabama	State Program	40750	02/28/2023
Arkansas	State Program	88-0650	02/07/2023
California	State Program	2904	06/30/2022
Florida	State Program - NELAP	E871157	06/30/2022
Georgia	State Program	C044	02/18/2023
Georgia	State Program	04015	06/30/2022
Illinois	State Program - NELAP	200078	10/10/2022
Kentucky	State Program	80215	06/30/2022
Kentucky	State Program	KY90047	12/31/2022
Louisiana	State Program - NELAP	LA037	12/31/2022
Louisiana	State Program - NELAP	04015	06/30/2022
Mississippi	State Program	MS	02/11/2023
North Carolina	State Program	415	12/31/2022
Pennsylvania	State Program - NELAP	68-03195	05/31/2022
South Carolina	State Program	84002	06/30/2022
South Carolina	State Program	84002	06/30/2022
Tennessee	State Program	02027	02/11/2023
Texas	State Program - NELAP	T104704180	09/30/2022
Virginia	State Program	00106	06/30/2022
Virginia	State Program - NELAP	460181	09/14/2022

Laboratory ID: WP RMS: Waypoint Analytical Mississippi, Inc., Ridgeland, MS

State	Program	Lab ID	Expiration Date
Arkansas	State Program	88-1409	02/01/2023
Kentucky	State Program	KY98013	12/31/2021
Louisiana	State Program - NELAP	04023	06/30/2022
North Carolina	State Program	694	12/31/2021

Page 1 of 1 00004/22-102-0027



Sample Summary Table

Report Number: 22-102-0027

Client Project Description: Metals Analysis

Lab No	Client Sample ID	Matrix	Date Collected	Date Received	Method	Lab ID
77841	#1 11303 Pawnee Dr.	Wipes	04/09/2022 13:41	04/12/2022	6010D	WP MTN
77842	#2 4802 Mohawk	Wipes	04/09/2022 13:54	04/12/2022	6010D	WP MTN
77843	#3 4810 Seminole	Wipes	04/09/2022 14:05	04/12/2022	6010D	WP MTN
77844	#4 1502 Cherokee	Wipes	04/09/2022 14:12	04/12/2022	6010D	WP MTN
77845	#5 1007 Cherokee	Wipes	04/09/2022 16:33	04/12/2022	6010D	WP MTN



Summary of Detected Analytes

Project: Metals Analysis

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
#1 11303 Pawnee	G 77841					
Dr.	Alumainum	1270		F 00	04/10/2022 00:04	
6010D	Aluminum	1370	μg/Wipe	5.00	04/19/2022 08:04	
6010D	Antimony	4.72	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Arsenic	3.28	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Barium	65.5	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Beryllium	0.0700	μg/Wipe	0.0500	04/19/2022 08:04	
6010D	Calcium	4510	μg/Wipe	50.0	04/19/2022 08:04	
5010D	Cadmium	0.135	μg/Wipe	0.100	04/19/2022 08:04	
6010D	Chromium	7.75	μg/Wipe	0.250	04/19/2022 08:04	
6010D	Cobalt	0.885	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Copper	51.8	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Iron	3340	μg/Wipe	10.0	04/19/2022 08:04	
6010D	Lead	7.05	μg/Wipe	0.300	04/19/2022 08:04	
6010D	Magnesium	472	μg/Wipe	5.00	04/19/2022 08:04	
5010D	Manganese	27.3	μg/Wipe	0.500	04/19/2022 08:04	
5010D	Molybdenum	6.68	μg/Wipe	0.250	04/19/2022 08:04	
5010D	Nickel	6.75	μg/Wipe	0.250	04/19/2022 08:04	
5010D	Potassium	691	μg/Wipe	10.0	04/19/2022 08:04	
6010D	Sodium	1190	μg/Wipe	25.0	04/19/2022 08:04	
6010D	Tin	4.86	μg/Wipe	2.50	04/19/2022 08:04	
5010D	Titanium	75.3	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Vanadium	7.23	μg/Wipe	0.500	04/19/2022 08:04	
6010D	Zinc	192	μg/Wipe	1.25	04/19/2022 08:04	
#2 4802 Mohawk	G 77842					
6010D	Aluminum	1830	μg/Wipe	5.00	04/19/2022 08:09	
5010D	Antimony	1.01	μg/Wipe	0.500	04/19/2022 08:09	
5010D	Arsenic	1.88	μg/Wipe	0.500	04/19/2022 08:09	
5010D	Barium	48.9	μg/Wipe	0.500	04/19/2022 08:09	
5010D	Calcium	6620	μg/Wipe	50.0	04/19/2022 08:09	
5010D	Cadmium	0.225	μg/Wipe	0.100	04/19/2022 08:09	
5010D	Chromium	5.35	μg/Wipe	0.250	04/19/2022 08:09	
5010D	Copper	35.1	μg/Wipe	0.500	04/19/2022 08:09	
5010D	Iron	1850	μg/Wipe	10.0	04/19/2022 08:09	
5010D	Lead	12.2	μg/Wipe	0.300	04/19/2022 08:09	
5010D	Magnesium	465	μg/Wipe	5.00	04/19/2022 08:09	
5010D	Manganese	27.5	μg/Wipe	0.500	04/19/2022 08:09	
	Molybdenum	2.73	μg/Wipe	0.250	04/19/2022 08:09	



Summary of Detected Analytes

Project: Metals Analysis

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifier
#2 4802 Mohawk	G 77842					
6010D	Nickel	3.28	μg/Wipe	0.250	04/19/2022 08:09	
6010D	Potassium	696	μg/Wipe	10.0	04/19/2022 08:09	
6010D	Sodium	739	μg/Wipe	25.0	04/19/2022 08:09	
6010D	Tin	28.1	μg/Wipe	2.50	04/19/2022 08:09	
6010D	Titanium	40.7	μg/Wipe	0.500	04/19/2022 08:09	
6010D	Vanadium	3.30	μg/Wipe	0.500	04/19/2022 08:09	
5010D	Zinc	202	μg/Wipe	1.25	04/19/2022 08:09	
#3 4810 Seminole	G 77843					
5010D	Aluminum	1600	μg/Wipe	5.00	04/19/2022 08:14	
5010D	Antimony	2.71	μg/Wipe	0.500	04/19/2022 08:14	
5010D	Arsenic	5.43	μg/Wipe	0.500	04/19/2022 08:14	
5010D	Barium	124	μg/Wipe	0.500	04/19/2022 08:14	
6010D	Beryllium	0.0750	μg/Wipe	0.0500	04/19/2022 08:14	
6010D	Calcium	11000	μg/Wipe	250	04/20/2022 16:30	
6010D	Cadmium	0.225	μg/Wipe	0.100	04/19/2022 08:14	
6010D	Chromium	15.7	μg/Wipe	0.250	04/19/2022 08:14	
6010D	Cobalt	10.9	μg/Wipe	0.500	04/19/2022 08:14	
6010D	Copper	122	μg/Wipe	0.500	04/19/2022 08:14	
6010D	Iron	7660	μg/Wipe	10.0	04/19/2022 08:14	
6010D	Lead	15.3	μg/Wipe	0.300	04/19/2022 08:14	
6010D	Magnesium	1060	μg/Wipe	5.00	04/19/2022 08:14	
6010D	Manganese	83.0	μg/Wipe	0.500	04/19/2022 08:14	
5010D	Molybdenum	12.6	μg/Wipe	0.250	04/19/2022 08:14	
6010D	Nickel	15.0	μg/Wipe	0.250	04/19/2022 08:14	
5010D	Potassium	677	μg/Wipe	10.0	04/19/2022 08:14	
5010D	Silver	0.385	μg/Wipe	0.250	04/19/2022 08:14	
5010D	Sodium	2740	μg/Wipe	25.0	04/19/2022 08:14	
5010D	Tin	8.73	μg/Wipe	2.50	04/19/2022 08:14	
5010D	Titanium	76.9	μg/Wipe	0.500	04/19/2022 08:14	
5010D	Vanadium	6.60	μg/Wipe	0.500	04/19/2022 08:14	
6010D	Zinc	480	μg/Wipe	1.25	04/19/2022 08:14	
#4 1502 Cherokee	G 77844					
6010D	Aluminum	294	μg/Wipe	5.00	04/19/2022 08:19	
6010D	Antimony	0.690	μg/Wipe	0.500	04/19/2022 08:19	
6010D	Arsenic	0.795	μg/Wipe	0.500	04/19/2022 08:19	
6010D	Barium	17.0	μg/Wipe	0.500	04/19/2022 08:19	



Summary of Detected Analytes

Project: Metals Analysis

# 1502 Cherokee	Client Sample ID	Lab Sample ID					
Section Sect	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
Control Chromium Copper 17.0	#4 1502 Cherokee	G 77844					
6010D Copper 17.0 µg/Wipe 0.500 04/19/2022 08.19 6010D Iron 1070 µg/Wipe 10.0 04/19/2022 08.19 6010D Lead 1.56 µg/Wipe 0.300 04/19/2022 08.19 6010D Magnesium 17.4 µg/Wipe 5.00 04/19/2022 08.19 6010D Manganese 11.8 µg/Wipe 0.500 04/19/2022 08.19 6010D Molybdenum 0.705 µg/Wipe 0.250 04/19/2022 08.19 6010D Nickel 1.92 µg/Wipe 0.250 04/19/2022 08.19 6010D Potassium 3.40 µg/Wipe 1.00 04/19/2022 08.19 6010D Sodium 474 µg/Wipe 0.500 04/19/2022 08.19 6010D Titanium 0.760 µg/Wipe 0.500 04/19/2022 08.19 6010D Zinc 1.09 µg/Wipe 0.500 04/19/2022 08.19 6010D Aluminum 1.060 µg/Wipe 0.500 04/19/2022 08.19	6010D	Calcium	897	μg/Wipe	50.0	04/19/2022 08:19	
1070 1070	6010D	Chromium	2.11	μg/Wipe	0.250	04/19/2022 08:19	
Section Lead	6010D	Copper	17.0	μg/Wipe	0.500	04/19/2022 08:19	
6010D Magnesium 174 µg/Wipe 5.00 04/19/2022 08:19 6010D Manganese 11.8 µg/Wipe 0.500 04/19/2022 08:19 6010D Molybdenum 0.705 µg/Wipe 0.250 04/19/2022 08:19 6010D Nickel 1.92 µg/Wipe 0.250 04/19/2022 08:19 6010D Potassium 340 µg/Wipe 0.50 04/19/2022 08:19 6010D Sodium 474 µg/Wipe 0.500 04/19/2022 08:19 6010D Titanium 1.04 µg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 1.09 µg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 1.09 µg/Wipe 0.500 04/19/2022 08:19 6010D Aluminum 1.060 µg/Wipe 0.500 04/19/2022 08:24 6010D Aluminum 1.060 µg/Wipe 0.500 04/19/2022 08:24 6010D Aluminum 1.060 µg/Wipe 0.500 04/19/2022 08:24 <td>6010D</td> <td>Iron</td> <td>1070</td> <td>μg/Wipe</td> <td>10.0</td> <td>04/19/2022 08:19</td> <td></td>	6010D	Iron	1070	μg/Wipe	10.0	04/19/2022 08:19	
6010D Manganese 11.8 μg/Wipe 0.500 04/19/2022 08:19 6010D Molybdenum 0.705 μg/Wipe 0.250 04/19/2022 08:19 6010D Nickel 1.92 μg/Wipe 0.250 04/19/2022 08:19 6010D Potassium 340 μg/Wipe 0.50 04/19/2022 08:19 6010D Sodium 474 μg/Wipe 0.500 04/19/2022 08:19 6010D Titanium 10.4 μg/Wipe 0.500 04/19/2022 08:19 6010D Vanadium 0.780 μg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 μg/Wipe 0.500 04/19/2022 08:19 6010D Alaminum 1060 μg/Wipe 0.500 04/19/2022 08:19 6010D Aluminum 1060 μg/Wipe 0.500 04/19/2022 08:24 6010D Asteric 4.29 μg/Wipe 0.500 04/19/2022 08:24 6010D Barium 5.30 μg/Wipe 0.000 04/19/2022 08:24 <td>6010D</td> <td>Lead</td> <td>1.56</td> <td>μg/Wipe</td> <td>0.300</td> <td>04/19/2022 08:19</td> <td></td>	6010D	Lead	1.56	μg/Wipe	0.300	04/19/2022 08:19	
Molybdenum 0.705 μg/Wipe 0.250 04/19/2022 08:19	6010D	Magnesium	174	μg/Wipe	5.00	04/19/2022 08:19	
6010D Nickel 1.92 μg/Wipe 0.250 04/19/2022 08:19 6010D Potassium 340 μg/Wipe 10.0 04/19/2022 08:19 6010D Sodium 474 μg/Wipe 25.0 04/19/2022 08:19 6010D Titanium 10.4 μg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 μg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 μg/Wipe 0.500 04/19/2022 08:19 6010D Aluminum 1060 μg/Wipe 1.25 04/19/2022 08:19 6010D Aluminum 1060 μg/Wipe 5.00 04/19/2022 08:24 6010D Arsenic 4.29 μg/Wipe 0.500 04/19/2022 08:24 6010D Barium 5.30 μg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7.47 μg/Wipe 0.500 04/19/2022 08:24	6010D	Manganese	11.8	μg/Wipe	0.500	04/19/2022 08:19	
6010D Potassium 340 μg/Wipe 10.0 04/19/2022 08:19 6010D Sodium 474 μg/Wipe 25.0 04/19/2022 08:19 6010D Titanium 10.4 μg/Wipe 0.500 04/19/2022 08:19 6010D Vanadium 0.780 μg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 μg/Wipe 0.500 04/19/2022 08:19 85 1007 Cherokee G 77845 S V 1.25 04/19/2022 08:24 6010D Aluminum 1060 μg/Wipe 5.00 04/19/2022 08:24 6010D Antimony 2.58 μg/Wipe 0.500 04/19/2022 08:24 6010D Asranic 4.29 μg/Wipe 0.500 04/19/2022 08:24 6010D Baryllium 0.0500 μg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 0.500 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 <td>6010D</td> <td>Molybdenum</td> <td>0.705</td> <td>μg/Wipe</td> <td>0.250</td> <td>04/19/2022 08:19</td> <td></td>	6010D	Molybdenum	0.705	μg/Wipe	0.250	04/19/2022 08:19	
6010D Sodium 474 µg/Wipe 25.0 04/19/2022 08:19 6010D Titanium 10.4 µg/Wipe 0.500 04/19/2022 08:19 6010D Vanadium 0.780 µg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 µg/Wipe 1.25 04/19/2022 08:19 #5 1007 Cherokee G77845 F F 5.00 04/19/2022 08:24 6010D Aluminum 1060 µg/Wipe 0.500 04/19/2022 08:24 6010D Antimony 2.58 µg/Wipe 0.500 04/19/2022 08:24 6010D Arsenic 4.29 µg/Wipe 0.500 04/19/2022 08:24 6010D Barium 0.0500 µg/Wipe 0.500 04/19/2022 08:24 6010D Beyllium 0.0500 µg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 µg/Wipe 0.50 04/19/2022 08:24 6010D Chromium 7.47 µg/Wipe 0.50 04/19/2022 08:24	6010D	Nickel	1.92	μg/Wipe	0.250	04/19/2022 08:19	
6010D Titanium 10.4 µg/Wipe 0.500 04/19/2022 08:19 6010D Vanadium 0.780 µg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 µg/Wipe 1.25 04/19/2022 08:19 #5 1007 Cherokee G 77845 S S S S 6010D Aluminum 1060 µg/Wipe 5.00 04/19/2022 08:24 6010D Arsenic 4.29 µg/Wipe 0.500 04/19/2022 08:24 6010D Barium 53.0 µg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 µg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 µg/Wipe 0.00 04/19/2022 08:24 6010D Cadmium 0.285 µg/Wipe 0.50 04/19/2022 08:24 6010D Chromium 7.47 µg/Wipe 0.50 04/19/2022 08:24 6010D Cobalt 3.56 µg/Wipe 0.50 04/19/2022 08:24	6010D	Potassium	340	μg/Wipe	10.0	04/19/2022 08:19	
6010D Vanadium 0.780 μg/Wipe 0.500 04/19/2022 08:19 6010D Zinc 109 μg/Wipe 1.25 04/19/2022 08:19 #5 1007 Cherokee G 77845 6010D Aluminum 1060 μg/Wipe 5.00 04/19/2022 08:24 6010D Antimony 2.58 μg/Wipe 0.500 04/19/2022 08:24 6010D Arsenic 4.29 μg/Wipe 0.500 04/19/2022 08:24 6010D Barium 53.0 μg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 μg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 0.00 04/19/2022 08:24 6010D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860	6010D	Sodium	474	μg/Wipe	25.0	04/19/2022 08:19	
6010D Zinc 109 µg/Wipe 1.25 04/19/2022 08:19 #5 1007 Cherokee G 77845 #5 100D Aluminum 1060 µg/Wipe 5.00 04/19/2022 08:24 6010D Antimony 2.58 µg/Wipe 0.500 04/19/2022 08:24 6010D Arsenic 4.29 µg/Wipe 0.500 04/19/2022 08:24 6010D Barium 5.30 µg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 µg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 µg/Wipe 5.00 04/19/2022 08:24 6010D Cadmium 0.285 µg/Wipe 0.500 04/19/2022 08:24 6010D Chromium 7.47 µg/Wipe 0.500 04/19/2022 08:24 6010D Cobalt 3.56 µg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 µg/Wipe 0.500 04/19/2022 08:24 6010D Magnesium 626	6010D	Titanium	10.4	μg/Wipe	0.500	04/19/2022 08:19	
#5 1007 Cherokee G 77845 6010D Aluminum 1060 μg/Wipe 5.00 04/19/2022 08:24 6010D Antimony 2.5.8 μg/Wipe 0.500 04/19/2022 08:24 6010D Arsenic 4.2.9 μg/Wipe 0.500 04/19/2022 08:24 6010D Barium 53.0 μg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 μg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 50.0 04/19/2022 08:24 6010D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 6010D Choper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.500 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 10.0 04/19/2022 08:24 6010D Magnese 46.6 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 5.00 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.500 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.500 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 5.00 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 5.00 04/19/2022 08:24 6010D Silver 0.475 μg/Wipe 5.00 04/19/2022 08:24	6010D	Vanadium	0.780	μg/Wipe	0.500	04/19/2022 08:19	
Aluminum 1060 µg/Wipe 5.00 04/19/2022 08:24 6010D Antimony 2.58 µg/Wipe 0.500 04/19/2022 08:24 6010D Arsenic 4.29 µg/Wipe 0.500 04/19/2022 08:24 6010D Barium 53.0 µg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 µg/Wipe 0.500 04/19/2022 08:24 6010D Calcium 7740 µg/Wipe 50.0 04/19/2022 08:24 6010D Cadmium 0.285 µg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 µg/Wipe 0.500 04/19/2022 08:24 6010D Cobalt 3.56 µg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 µg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 µg/Wipe 0.500 04/19/2022 08:24 6010D Lead 15.7 µg/Wipe 0.500 04/19/2022 08:24 6010D Magnesium 626 µg/Wipe 1.00 04/19/2022 08:24 6010D Magnesium 626 µg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 µg/Wipe 5.00 04/19/2022 08:24 6010D Molybdenum 9.63 µg/Wipe 0.500 04/19/2022 08:24 6010D Nickel 8.50 µg/Wipe 5.00 04/19/2022 08:24 6010D Nickel 8.50 µg/Wipe 5.00 04/19/2022 08:24 6010D Silver 0.475 µg/Wipe 5.00 04/19/2022 08:24 6010D Sodium 2010 µg/Wipe 5.00 04/19/2022 08:24	6010D	Zinc	109	μg/Wipe	1.25	04/19/2022 08:19	
Antimony 2.58 µg/Wipe 0.500 04/19/2022 08:24 Arsenic 4.29 µg/Wipe 0.500 04/19/2022 08:24 Barium 53.0 µg/Wipe 0.500 04/19/2022 08:24 Barium 7740 µg/Wipe 50.0 04/19/2022 08:24 Barium 7740 µg/Wipe 50.0 04/19/2022 08:24 Barium 7740 µg/Wipe 0.100 04/19/2022 08:24 Barium 7747 µg/Wipe 0.250 04/19/2022 08:24 Barium 7747 µg/Wipe 0.500 04/19/2022 08:24 Barium 7748 µg/Wipe 0.500 04/19/2022 08:24 Barium 7749 µg/Wipe 0	#5 1007 Cherokee	G 77845					
6610D Arsenic 4.29 μg/Wipe 0.500 04/19/2022 08:24 6610D Barium 53.0 μg/Wipe 0.500 04/19/2022 08:24 6610D Beryllium 0.0500 μg/Wipe 0.0500 04/19/2022 08:24 6610D Calcium 7740 μg/Wipe 50.0 04/19/2022 08:24 6610D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6610D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 6610D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6610D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6610D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6610D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6610D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6610D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24	6010D	Aluminum	1060	μg/Wipe	5.00	04/19/2022 08:24	
6010D Barium 53.0 μg/Wipe 0.500 04/19/2022 08:24 6010D Beryllium 0.0500 μg/Wipe 0.0500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 50.0 04/19/2022 08:24 6010D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 <	6010D	Antimony	2.58	μg/Wipe	0.500	04/19/2022 08:24	
6010D Beryllium 0.0500 μg/Wipe 0.0500 04/19/2022 08:24 6010D Calcium 7740 μg/Wipe 50.0 04/19/2022 08:24 6010D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.500 04/19/2022 08:24 6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 0.250 04/19/2022 08:24	6010D	Arsenic	4.29	μg/Wipe	0.500	04/19/2022 08:24	
6010D Calcium 7740 µg/Wipe 50.0 04/19/2022 08:24 6010D Cadmium 0.285 µg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 µg/Wipe 0.250 04/19/2022 08:24 6010D Cobalt 3.56 µg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 µg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 µg/Wipe 0.300 04/19/2022 08:24 6010D Lead 15.7 µg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 µg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 µg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 µg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 µg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 µg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 µg/Wipe 2.50 04/19/	6010D	Barium	53.0	μg/Wipe	0.500	04/19/2022 08:24	
6010D Cadmium 0.285 μg/Wipe 0.100 04/19/2022 08:24 6010D Chromium 7.47 μg/Wipe 0.250 04/19/2022 08:24 6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Mickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 5.00 04/19/2022 08:24 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022	6010D	Beryllium	0.0500	μg/Wipe	0.0500	04/19/2022 08:24	
6010D Chromium 7.47 μg/Wipe 0.250 04/19/2022 08:24 6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 5.00 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/202	6010D	Calcium	7740	μg/Wipe	50.0	04/19/2022 08:24	
6010D Cobalt 3.56 μg/Wipe 0.500 04/19/2022 08:24 6010D Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 50.0 04/19/2022 08:24 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Cadmium	0.285	μg/Wipe	0.100	04/19/2022 08:24	
Copper 101 μg/Wipe 0.500 04/19/2022 08:24 6010D Iron 3860 μg/Wipe 10.0 04/19/2022 08:24 6010D Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 5.00 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 2.50 04/19/2022 08:24	6010D	Chromium	7.47	μg/Wipe	0.250	04/19/2022 08:24	
Form Sample Form Sample Samp	6010D	Cobalt	3.56	μg/Wipe	0.500	04/19/2022 08:24	
Lead 15.7 μg/Wipe 0.300 04/19/2022 08:24 6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 5.00 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Copper	101	μg/Wipe	0.500	04/19/2022 08:24	
6010D Magnesium 626 μg/Wipe 5.00 04/19/2022 08:24 6010D Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Iron	3860	μg/Wipe	10.0	04/19/2022 08:24	
Manganese 46.6 μg/Wipe 0.500 04/19/2022 08:24 6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Lead	15.7	μg/Wipe	0.300	04/19/2022 08:24	
6010D Molybdenum 9.63 μg/Wipe 0.250 04/19/2022 08:24 6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Magnesium	626	μg/Wipe	5.00	04/19/2022 08:24	
6010D Nickel 8.50 μg/Wipe 0.250 04/19/2022 08:24 6010D Potassium 1260 μg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Manganese	46.6	μg/Wipe	0.500	04/19/2022 08:24	
6010D Potassium 1260 μg/Wipe 50.0 04/20/2022 16:35 6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Molybdenum	9.63	μg/Wipe	0.250	04/19/2022 08:24	
6010D Silver 0.475 μg/Wipe 0.250 04/19/2022 08:24 6010D Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Nickel	8.50	μg/Wipe	0.250	04/19/2022 08:24	
Sodium 2010 μg/Wipe 25.0 04/19/2022 08:24 6010D Tin 8.09 μg/Wipe 2.50 04/19/2022 08:24	6010D	Potassium	1260	μg/Wipe	50.0	04/20/2022 16:35	
6010D Tin 8.09 µg/Wipe 2.50 04/19/2022 08:24	6010D	Silver	0.475	μg/Wipe	0.250	04/19/2022 08:24	
	6010D	Sodium	2010	μg/Wipe	25.0	04/19/2022 08:24	
5010D Titanium 43.2 μg/Wipe 0.500 04/19/2022 08:24	6010D	Tin	8.09	μg/Wipe	2.50	04/19/2022 08:24	
	6010D	Titanium	43.2	μg/Wipe	0.500	04/19/2022 08:24	



Summary of Detected Analytes

Project: Metals Analysis

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
#5 1007 Cherokee	G 77845					
6010D	Vanadium	4.61	μg/Wipe	0.500	04/19/2022 08:24	
6010D	Zinc	511	μg/Wipe	1.25	04/19/2022 08:24	



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Report Number: 22-102-0027

Project Metals Analysis

Information:

Brian Herrington

Report Date: 04/22/2022

Technical Director

Received: 04/12/2022

Lab No: 77841 Matrix: Wipes

Sample ID: **#1 11303 Pawnee Dr.** Sampled: **4/9/2022 13:41**

REPORT OF ANALYSIS

						_	
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
_							
Aluminum	1370	μg/Wipe	5.00	1	04/19/22 08:04	JTR	6010D
Antimony	4.72	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Arsenic	3.28	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Barium	65.5	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Beryllium	0.0700	μg/Wipe	0.0500	1	04/19/22 08:04	JTR	6010D
Calcium	4510	μg/Wipe	50.0	1	04/19/22 08:04	JTR	6010D
Cadmium	0.135	μg/Wipe	0.100	1	04/19/22 08:04	JTR	6010D
Chromium	7.75	μg/Wipe	0.250	1	04/19/22 08:04	JTR	6010D
Cobalt	0.885	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Copper	51.8	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Iron	3340	μg/Wipe	10.0	1	04/19/22 08:04	JTR	6010D
Lead	7.05	μg/Wipe	0.300	1	04/19/22 08:04	JTR	6010D
Magnesium	472	μg/Wipe	5.00	1	04/19/22 08:04	JTR	6010D
Manganese	27.3	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Molybdenum	6.68	μg/Wipe	0.250	1	04/19/22 08:04	JTR	6010D
Nickel	6.75	μg/Wipe	0.250	1	04/19/22 08:04	JTR	6010D
Potassium	691	μg/Wipe	10.0	1	04/19/22 08:04	JTR	6010D
Selenium	<0.500	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Silver	<0.250	μg/Wipe	0.250	1	04/19/22 08:04	JTR	6010D
Sodium	1190	μg/Wipe	25.0	1	04/19/22 08:04	JTR	6010D
Tin	4.86	μg/Wipe	2.50	1	04/19/22 08:04	JTR	6010D
Titanium	75.3	μg/Wipe	0.500	1	04/19/22 08:04	JTR	6010D
Thallium	<1.00	μg/Wipe	1.00	1	04/19/22 08:04	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Project Metals Analysis

Information:

B&

Report Date: 04/22/2022

Received: 04/12/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No : 77841 Matrix: Wipes

Sample ID : **#1 11303 Pawnee Dr.** Sampled: **4/9/2022 13:41**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Vanadium	7.23	μg/Wipe	0.500	1	04/10/22 09:04	1TD	60100
variaulum	7.23	µg/ wipe	0.500	1	04/19/22 08:04	JIK	6010D
Zinc	192	μg/Wipe	1.25	1	04/19/22 08:04	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581 Project Metals Analysis

Information:

38

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Report Date: 04/22/2022

Received: 04/12/2022

Lab No: 77842 Matrix: Wipes

Sample ID: **#2 4802 Mohawk** Sampled: **4/9/2022 13:54**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Aluminum	1830	μg/Wipe	5.00	1	04/19/22 08:09	JTR	6010D
Antimony	1.01	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Arsenic	1.88	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Barium	48.9	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Beryllium	<0.0500	μg/Wipe	0.0500	1	04/19/22 08:09	JTR	6010D
Calcium	6620	μg/Wipe	50.0	1	04/19/22 08:09	JTR	6010D
Cadmium	0.225	μg/Wipe	0.100	1	04/19/22 08:09	JTR	6010D
Chromium	5.35	μg/Wipe	0.250	1	04/19/22 08:09	JTR	6010D
Cobalt	<0.500	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Copper	35.1	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Iron	1850	μg/Wipe	10.0	1	04/19/22 08:09	JTR	6010D
Lead	12.2	μg/Wipe	0.300	1	04/19/22 08:09	JTR	6010D
Magnesium	465	μg/Wipe	5.00	1	04/19/22 08:09	JTR	6010D
Manganese	27.5	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Molybdenum	2.73	μg/Wipe	0.250	1	04/19/22 08:09	JTR	6010D
Nickel	3.28	μg/Wipe	0.250	1	04/19/22 08:09	JTR	6010D
Potassium	696	μg/Wipe	10.0	1	04/19/22 08:09	JTR	6010D
Selenium	<0.500	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Silver	<0.250	μg/Wipe	0.250	1	04/19/22 08:09	JTR	6010D
Sodium	739	μg/Wipe	25.0	1	04/19/22 08:09	JTR	6010D
Tin	28.1	μg/Wipe	2.50	1	04/19/22 08:09	JTR	6010D
Titanium	40.7	μg/Wipe	0.500	1	04/19/22 08:09	JTR	6010D
Thallium	<1.00	μg/Wipe	1.00	1	04/19/22 08:09	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula, MS 39581

Project Metals Analysis

Information:

BK-

Report Date: 04/22/2022

Received: 04/12/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No : 77842 Matrix: Wipes

Sample ID : **#2 4802 Mohawk** Sampled: **4/9/2022 13:54**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Vanadium	2.22	ug/Mino	0.500		04/40/22 00 00	170	60100
Vanadium	3.30	μg/Wipe	0.500	1	04/19/22 08:09	JIR	6010D
Zinc	202	μg/Wipe	1.25	1	04/19/22 08:09	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Report Number: 22-102-0027

Project Metals Analysis

Information:

REPORT OF ANALYSIS

Brian Herrington Technical Director

Report Date: 04/22/2022

Received: 04/12/2022

Lab No : 77843 Matrix: Wipes

Sample ID : **#3 4810 Seminole** Sampled: **4/9/2022 14:05**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Aluminum	1600	μg/Wipe	5.00	1	04/19/22 08:14	JTR	6010D
Antimony	2.71	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Arsenic	5.43	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Barium	124	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Beryllium	0.0750	μg/Wipe	0.0500	1	04/19/22 08:14	JTR	6010D
Calcium	11000	μg/Wipe	250	5	04/20/22 16:30	TJS	6010D
Cadmium	0.225	μg/Wipe	0.100	1	04/19/22 08:14	JTR	6010D
Chromium	15.7	μg/Wipe	0.250	1	04/19/22 08:14	JTR	6010D
Cobalt	10.9	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Copper	122	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Iron	7660	μg/Wipe	10.0	1	04/19/22 08:14	JTR	6010D
Lead	15.3	μg/Wipe	0.300	1	04/19/22 08:14	JTR	6010D
Magnesium	1060	μg/Wipe	5.00	1	04/19/22 08:14	JTR	6010D
Manganese	83.0	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Molybdenum	12.6	μg/Wipe	0.250	1	04/19/22 08:14	JTR	6010D
Nickel	15.0	μg/Wipe	0.250	1	04/19/22 08:14	JTR	6010D
Potassium	677	μg/Wipe	10.0	1	04/19/22 08:14	JTR	6010D
Selenium	<0.500	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Silver	0.385	μg/Wipe	0.250	1	04/19/22 08:14	JTR	6010D
Sodium	2740	μg/Wipe	25.0	1	04/19/22 08:14	JTR	6010D
Tin	8.73	μg/Wipe	2.50	1	04/19/22 08:14	JTR	6010D
Titanium	76.9	μg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Thallium	<1.00	μg/Wipe	1.00	1	04/19/22 08:14	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Project Metals Analysis

Information:

BS-

Report Date: 04/22/2022

Received: 04/12/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No : 77843 Matrix: Wipes

Sample ID : **#3 4810 Seminole** Sampled: **4/9/2022 14:05**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Vanadium		ug/Mino	0.500		04/10/22 00 14	170	60100
Vanadium	6.60	µg/Wipe	0.500	1	04/19/22 08:14	JTR	6010D
Zinc	480	μg/Wipe	1.25	1	04/19/22 08:14	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581 Project Metals Analysis

Information:

38

Report Date: 04/22/2022

Received: 04/12/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No: 77844 Matrix: Wipes

Sample ID: **#4 1502 Cherokee** Sampled: **4/9/2022 14:12**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Aluminum	294	μg/Wipe	5.00	1	04/19/22 08:19	JTR	6010D
Antimony	0.690	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Arsenic	0.795	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Barium	17.0	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Beryllium	<0.0500	μg/Wipe	0.0500	1	04/19/22 08:19	JTR	6010D
Calcium	897	μg/Wipe	50.0	1	04/19/22 08:19	JTR	6010D
Cadmium	<0.100	μg/Wipe	0.100	1	04/19/22 08:19	JTR	6010D
Chromium	2.11	μg/Wipe	0.250	1	04/19/22 08:19	JTR	6010D
Cobalt	<0.500	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Copper	17.0	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Iron	1070	μg/Wipe	10.0	1	04/19/22 08:19	JTR	6010D
Lead	1.56	μg/Wipe	0.300	1	04/19/22 08:19	JTR	6010D
Magnesium	174	μg/Wipe	5.00	1	04/19/22 08:19	JTR	6010D
Manganese	11.8	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Molybdenum	0.705	μg/Wipe	0.250	1	04/19/22 08:19	JTR	6010D
Nickel	1.92	μg/Wipe	0.250	1	04/19/22 08:19	JTR	6010D
Potassium	340	μg/Wipe	10.0	1	04/19/22 08:19	JTR	6010D
Selenium	<0.500	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Silver	<0.250	μg/Wipe	0.250	1	04/19/22 08:19	JTR	6010D
Sodium	474	μg/Wipe	25.0	1	04/19/22 08:19	JTR	6010D
Tin	<2.50	μg/Wipe	2.50	1	04/19/22 08:19	JTR	6010D
Titanium	10.4	μg/Wipe	0.500	1	04/19/22 08:19	JTR	6010D
Thallium	<1.00	μg/Wipe	1.00	1	04/19/22 08:19	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Project Metals Analysis

Information:

BS-

Report Date: 04/22/2022

Received: 04/12/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No : 77844 Matrix: Wipes

Sample ID : **#4 1502 Cherokee** Sampled: **4/9/2022 14:12**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Vanadium	0.780	μg/Wipe	0.500	1	04/19/22 08:19	1TR	6010D
Zinc	109	μg/Wipe	1.25		04/19/22 08:19		6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Project Metals Analysis

Information:

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Report Date: 04/22/2022

Received: 04/12/2022

Lab No : 77845 Matrix: Wipes

Sample ID: **#5 1007 Cherokee** Sampled: **4/9/2022 16:33**

_						_	
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Aluminum	1060	μg/Wipe	5.00	1	04/19/22 08:24	JTR	6010D
Antimony	2.58	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Arsenic	4.29	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Barium	53.0	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Beryllium	0.0500	μg/Wipe	0.0500	1	04/19/22 08:24	JTR	6010D
Calcium	7740	μg/Wipe	50.0	1	04/19/22 08:24	JTR	6010D
Cadmium	0.285	μg/Wipe	0.100	1	04/19/22 08:24	JTR	6010D
Chromium	7.47	μg/Wipe	0.250	1	04/19/22 08:24	JTR	6010D
Cobalt	3.56	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Copper	101	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Iron	3860	μg/Wipe	10.0	1	04/19/22 08:24	JTR	6010D
Lead	15.7	μg/Wipe	0.300	1	04/19/22 08:24	JTR	6010D
Magnesium	626	μg/Wipe	5.00	1	04/19/22 08:24	JTR	6010D
Manganese	46.6	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Molybdenum	9.63	μg/Wipe	0.250	1	04/19/22 08:24	JTR	6010D
Nickel	8.50	μg/Wipe	0.250	1	04/19/22 08:24	JTR	6010D
Potassium	1260	μg/Wipe	50.0	5	04/20/22 16:35	TJS	6010D
Selenium	<0.500	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Silver	0.475	μg/Wipe	0.250	1	04/19/22 08:24	JTR	6010D
Sodium	2010	μg/Wipe	25.0	1	04/19/22 08:24	JTR	6010D
Tin	8.09	μg/Wipe	2.50	1	04/19/22 08:24	JTR	6010D
Titanium	43.2	μg/Wipe	0.500	1	04/19/22 08:24	JTR	6010D
Thallium	<1.00	μg/Wipe	1.00	1	04/19/22 08:24	JTR	6010D

Qualifiers/ Definitions DF

Dilution Factor

MQL



01516

Cherokee Concerned Citizens Ms. Jennifer Crosslin 1502 Cherokee Dr. Pascagoula , MS 39581

Project Metals Analysis

Information: Received: 04/12/2022

BK-

Report Date: 04/22/2022

Report Number: 22-102-0027 REPORT OF ANALYSIS

Brian Herrington Technical Director

Lab No : 77845 Matrix: Wipes

Sample ID: **#5 1007 Cherokee** Sampled: **4/9/2022 16:33**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Vanadium	4.61	μg/Wipe	0.500	1	04/19/22 08:24	1TD	6010D
	4.01		0.500	1	04/19/22 06:24	JIK	90100
Zinc	511	μg/Wipe	1.25	1	04/19/22 08:24	JTR	6010D

Qualifiers/ Definitions DF Dilution Factor

MQL



Quality Control Data

Client ID: Cherokee Concerned Citizens

Project Description: Metals Analysis
Report No: 22-102-0027

QC Prep: L611025 QC Analytical Batch(es): L611566
QC Prep Batch Method: 3050B Analysis Method: 6010D

Analysis Description: Metals Analysis

Lab Reagent BlankLRB-L611025Matrix: WIP

Associated Lab Samples: 77841, 77842, 77843, 77844, 77845

Parameter	Units	Blank Result	MQL	Analyzed
Aluminum	μg/Wipe	< 5.00	5.00	04/19/22 07:58
Antimony	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Arsenic	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Barium	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Beryllium	μg/Wipe	< 0.0500	0.0500	04/19/22 07:58
Calcium	μg/Wipe	< 50.0	50.0	04/19/22 07:58
Cadmium	μg/Wipe	< 0.100	0.100	04/19/22 07:58
Chromium	μg/Wipe	< 0.250	0.250	04/19/22 07:58
Cobalt	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Copper	μg/Wipe	0.575	0.500	04/19/22 07:58
Iron	μg/Wipe	< 10.0	10.0	04/19/22 07:58
Lead	μg/Wipe	< 0.300	0.300	04/19/22 07:58
Magnesium	μg/Wipe	< 5.00	5.00	04/19/22 07:58
Manganese	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Molybdenum	μg/Wipe	< 0.250	0.250	04/19/22 07:58
Nickel	μg/Wipe	< 0.250	0.250	04/19/22 07:58
Potassium	μg/Wipe	< 10.0	10.0	04/19/22 07:58
Selenium	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Silver	μg/Wipe	< 0.250	0.250	04/19/22 07:58
Sodium	μg/Wipe	< 25.0	25.0	04/19/22 07:58
Tin	μg/Wipe	< 2.50	2.50	04/19/22 07:58
Titanium	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Thallium	μg/Wipe	< 1.00	1.00	04/19/22 07:58
Vanadium	μg/Wipe	< 0.500	0.500	04/19/22 07:58
Zinc	μg/Wipe	< 1.25	1.25	04/19/22 07:58

Date: 04/22/2022 11:05 AM

Page 1 of 2



235 Highpoint Drive, Ridgeland, MS 39157 Main 601-957-2676 ° Fax 601-957-1887 www.waypointanalytical.com

Quality Control Data

Client ID: Cherokee Concerned Citizens

Project Description: Metals Analysis 22-102-0027 **Report No:**

QC Prep: L611025 **QC Analytical Batch(es):** L611566 QC Prep Batch Method: 3050B **Analysis Method:**

> **Analysis Description:** Metals Analysis

6010D

Laboratory Control Sample & LCSD LCS-L611025 LCSD-L611025

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Aluminum	μg/Wipe	500	510	525	102	105	80-120	2.8	20.0
Antimony	μg/Wipe	5.00	5.23	5.24	105	105	80-120	0.1	20.0
Arsenic	μg/Wipe	5.00	5.52	5.65	110	113	80-120	2.3	20.0
Barium	μg/Wipe	50.0	52.6	54.6	105	109	80-120	3.7	20.0
Beryllium	μg/Wipe	5.00	5.11	5.30	102	106	80-120	3.6	20.0
Calcium	μg/Wipe	500	537	557	107	111	80-120	3.6	20.0
Cadmium	μg/Wipe	5.00	5.25	5.44	105	109	80-120	3.5	20.0
Chromium	μg/Wipe	50.0	52.1	54.3	104	109	80-120	4.1	20.0
Cobalt	μg/Wipe	50.0	52.4	54.4	105	109	80-120	3.7	20.0
Copper	μg/Wipe	50.0	54.6	54.8	109	110	80-120	0.3	20.0
Iron	μg/Wipe	500	527	547	105	109	80-120	3.7	20.0
Lead	μg/Wipe	5.00	5.28	5.55	106	111	80-120	4.9	20.0
Magnesium	μg/Wipe	500	505	523	101	105	80-120	3.5	20.0
Manganese	μg/Wipe	50.0	52.5	54.7	105	109	80-120	4.1	20.0
Molybdenum	μg/Wipe	50.0	51.4	53.4	103	107	80-120	3.8	20.0
Nickel	μg/Wipe	50.0	53.6	55.7	107	111	80-120	3.8	20.0
Potassium	μg/Wipe	50.0	54.5	57.2	109	114	80-120	4.8	20.0
Selenium	μg/Wipe	5.00	5.03	5.10	101	102	80-120	1.3	20.0
Silver	μg/Wipe	5.00	5.08	5.33	102	107	80-120	4.8	20.0
Sodium	μg/Wipe	500	476	492	95.0	98.0	80-120	3.3	20.0
Tin	μg/Wipe	50.0	52.6	54.9	105	110	80-120	4.2	20.0
Titanium	μg/Wipe	50.0	50.8	52.6	102	105	80-120	3.4	20.0
Thallium	μg/Wipe	5.00	5.14	5.44	103	109	80-120	5.6	20.0
Vanadium	μg/Wipe	50.0	51.0	52.9	102	106	80-120	3.6	20.0
Zinc	μg/Wipe	50.0	54.0	56.1	108	112	80-120	3.8	20.0

Date: 04/22/2022 11:05 AM



235 Highpoint Drive, Ridgeland, MS 39157 Main 601-957-2676 ° Fax 601-957-1887 www.waypointanalytical.com

Shipment Receipt Form

Customer Number: 01516

Customer Name: Cherokee Concerned Citizens

Report Number: 22-102-0027

Shipping Method

O Fed Ex	O US Postal	◯ Lab		Other:		
UPS	○ Client	O Courie	r	Thermometer ID:		
Shipping cont	ainer/cooler uncompromise	ed?	Yes	○ No	,	
Number of co	olers/boxes received		1			
Custody seals	s intact on shipping contain	er/cooler?	O Yes	○ No	Not Pr	esent
Custody seals	s intact on sample bottles?		O Yes	○ No	Not Pr	esent
Chain of Cust	ody (COC) present?		Yes	○ No		
COC agrees	with sample label(s)?		Yes	○ No		
COC properly	completed		Yes	○ No		
Samples in pr	roper containers?		Yes	○ No		
Sample conta	iners intact?		Yes	○ No		
Sufficient san	nple volume for indicated te	est(s)?	Yes	○ No		
All samples re	eceived within holding time	?	Yes	○ No		
Cooler tempe	rature in compliance?		Yes	○ No		
	les arrived at the laboratory e considered acceptable as pegun.		○ Yes	No		
Water - Samp	ole containers properly pres	served	O Yes	○ No	● N/A	
Water - VOA	vials free of headspace		○ Yes	○ No	● N/A	
Trip Blanks received with VOAs			O Yes	○ No	N/A	
Soil VOA met	hod 5035 – compliance crit	eria met	O Yes	○ No	● N/A	
High conc	entration container (48 hr)		Low	concentration EnC	ore samplers (4	48 hr)
High conce	entration pre-weighed (met	hanol -14 d)	Low	conc pre-weighed	vials (Sod Bis -	14 d)
Special preca	utions or instructions includ	ded?	O Yes	No		
Comments:	UPS: 1Z56W2A94290363	019				

Signature: Janice Slaughter Date & Time: 04/12/2022 14:06:34

	Chero Ree	Chero Kee Concerned	Client Project Manager/Contact	act /17		1502 Che	Cherolee Dr.		22-102-0027 01516 0411-2022
	15076	502 Cherokee Dr Paxagolu = 37581	250 La 37581	- 6		scrinda	23581	Cherokee Concerned Citizens Metals Analysis	13.53.46
	Project Des	project Description 5 different I Diadroms 10 Cherokee Subdivision	Project/Site Location (City/State) Cherolzee Subdivision Pascagolua, MS	tate) odivis,	<u>ا</u> ا	RUSH – Additional charge Special Detection Limit(s) Date Results Needed	RUSH – Additional charges apply Special Detection Limit(s) Date Results Needed	Client Drop Off Other	undwater DW – Drinking Water S – Soil /Solid O – Oil P - Product M - Misc
	Project Number		Project Manager Phone # 228 365 4代7		7	Zend Zend Imail	ugouta)	Purchase Order Number	Site/Facility ID #
	Way	Waypoint Waypoint		1,000,000,000	5000	Senasi Fl			A Cool < 10C Na252O3 (Micro Only) B Cool <= 6C C H2SO4 pH<2 D None Required E NaOH pH>10
	235 Highpoint Dr. Ridgeland, MS 391 (601) 957-2676	Dr. 39157	Unless noted, all containers per Table II of 40 CFR Part 136.	o to nadmul	S)rab or (C)	DO09			F HNOS PHY Z G HCL pH-CZ H H3PO4 pH-CZ I Cool <= 6C NA252O3
	+		Sample Identification	+	+		Required Ana	Required Analysis / Preservative	Comme
	4/4	TT	PawneeDr	/		×			Wipe Front of house
Pag	1/2/1	:54pm #2 480	4802 Mohawk	`	\vdash	X			tront of house
e 21	22 2	#3	4810 Seminale	/		×			Wiped front back
of	2 12	AT	. Cherokee	/		X			Driver side back
21	批准	4.35gn \$5 1007	Cherolae	_	Н	X			Frontdoor
The second						\perp			
					+	\pm			
-	\forall				+				
-									
	eg (For Laboratory Use Only Custody Seals	Only Lab Comments	Jennifer	in the second se	Crasslir	lin	UPS: 1256W3A94999363019	1990363019
		Š		Relinquished	thed by	Relinquished by: (SIGNATURE)	.)	Date, Time Received by: (SIGNATURE)	Date Time
	Blank/C	Blank/Cooler Temp		Relinquis	hed by:	Relinquished by: (SIGNATURE)		HE (SIGNA	Myla/Jas Mymbomo Ujis/Jas NTURE) Date Time
	MEDIA	404		.0					9



Mailing Address: PO Box 1410 Ocean Springs, MS 39566-1410 6500 Sunplex Drive Ocean Springs, MS 39564 228.875.6420 Phone 228.875.6423 Fax

November 16, 2016

Barbara Weckesser

Work Order #: 1611105

Barbara Weckesser 1502 Cherokee Pascagoula, MS 39581

RF: Sand Blast Dust

Purchase Order #:

Enclosed are Micro-Methods Laboratory, Inc. results of analyses performed on samples received 11/04/16 10:16. If you have any questions concerning this report, please feel free to contact the office.

Sincerely,

Harry P. Howell

Hany P. Howell

President

Micro-Methods Laboratory, Inc.

DISCLAIMER

The results only relate to the items or the sample and/or samples received by the laboratory. This report shall not be reproduced except in full, without the approval of the laboratory. All test methods performed meet the requirements of NELAC 2009 Standards. Any variances and/or deviations specific to this analytical report are referenced in the lab report using qualifiers and detailed explanations found in the case narrative.



Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date/Time Sampled	Sampled by	Date/Time Received
Sand Blast Dust Driver Side Back Window	1611105-01	Wipe	11/04/16 10:00	Charles D. Bingham	11/04/16 10:16
and Blast Dust Hood	1611105-02	Wipe	11/04/16 10:00	Charles D. Bingham	11/04/16 10:16
Sample Receipt Conditions				0.45	2.1790
Date/Time Received: 11/4/2016	10:16:00AM		Shipped by:	Client Delivery	
Received by: Sarah E. Tomek			Submitted by:	Charles D. Binghai	m
Date/Time Logged: 11/4/2016	10:27:00AM		Logged by:	Sarah E. Tomek	
Cooler ID: no cooler		Re	ceipt Temperatur	e:°C	
Custody Seals	No		Received on	lce	No
Containers Intact	Yes		No Ice, Short	Trip	No
COC/Labels Agree	Yes		Obvious Cont	tamination	No
Labels Complete	No		Rush to meet	HT	No
COC Complete	Yes				



Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

CASE NARRATIVE SUMMARY

All reported results are within Micro-Methods Laboratory, Inc.defined laboratory quality control objectives unless detailed in narrative summary or identified as qualifications. NOTE: All results listed on this report are calculated on a wet weight basis (as received by the laboratory) unless otherwise noted in the analysis qualification sections.

Summary Comments:

Metals Analyst Comments-SCH:

MSCAN: Sample is scanned for the following 29 analytes: Li, Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn Mo, K, Ni, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, P. This scan does not include Hg. Other analytes may be available for analysis upon request. Instrument is calibrated for all analytes analyzed; however, the appropriate checks may not have been performed to confirm validity of calibration or may not have met method acceptance requirements for all analytes reported. All sample results should be considered estimated values and used for client's information only. 6010B

Total Metals-SW 6010B

Qualifiers:

MSCAN Metals Scan: Instrument calibrated for all targets analyzed but validity may not have been confirmed. Results should be considered estimated values and used for client's information only.

Analyte & Samples(s) Qualified:

1611105-01[Sand Blast Dust Driver Side Back Window], 1611105-02[Sand Blast Dust Hood], 6K07043-BLK1, 6K07043-BS1



Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

Sand Blast Dust Driver Side Back Window

1611105-01 (Wipe)

ording and desired		MDI	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
Analyte	Result	MRL	Units	ווט	Daton	, alony ot	Saparite Contract of the Contr			MSCAN
Metals by EPA 6000 Se	ries Methods IC	2.50	ug/wipe	1	6K07043	MMG	11/04/16	11/09/16	SW 6010B	
Aluminum	102	2.50					10:00	11:40		
Antimony	ND	2.50	W	•		MMG	•		•	
Arsenic	ND	2.50			•	MMG MMG	-			
Barium	4.35	0.500	"					•	•	
Beryllium	ND	0.200				MMG		•		
Boron	ND	2.50				MMG				
Cadmium	ND	0.500	"		•	MMG				
Calcium	467	2.50				MMG MMG			×	
chromium	1.00	0.500				19910001 12			•	
Cobalt	ND	2.50	"			MMG	r <u>u</u>			
	14.4	0.500		**		MMG				
opper	537	2.50		"					и	
on ead	ND	2.50	"		"	MMG	*			
thium	ND	2.50				MMG	_		n	
	44.9	2.50			311	MMG	-	•	w	
agnesium	2.94	2.50	**			MMG MMG			•	
anganese	3.06	2.50	11	ü			-	•		
olybdenum ickel	ND	2.00	**			MMG	_			
	146	15.0			n	MMG	_			
otassium	ND	2.50	•			MMG	1 00			
elenium	ND	0.250				MMG	•			
lver	162	5.00		u	**	MMG				
odium	ND	2.50	u.		11	MMG				
rontium	ND	2.50			W.	MMG		•		
allium		5.00	,,	11	n	MMG		•		
1	ND					MMG	•	•		
tanium	6.21	2.50			*	ммс				
nadium	ND	2.50				MMG			w	
nc	127	2.50				MMG			in .	
osphorus	26.8	2.50	"		(ST)	IAIIAIQ				





Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

Sand Blast Dust Hood 1611105-02 (Wipe)

							Date Time	Date Time		Overlide
Analyte	Result	MRL	Units	Dil	Batch	Analyst	Prepared	Analyzed	Method	Qualifiers
Metals by EPA 6000	Series Methods IC	P-AES								MSCAI
Aluminum	154	2.50	ug/wipe	1	6K0704	3 MMG	11/04/16 10:00	11/09/16 11:53	SW 6010B	
Antimony	ND	2.50		н		MMG	*	-	•	
Arsenic	ND	2.50	•	"		MMG		•	W	
Barium	5.84	0.500		"		MMG	•	•		
Beryllium	ND	0.200	**		•	MMG		•	110	
Boron	ND	2.50	(10)	"	W	MMG			•	
Cadmium	ND	0.500	•			MMG	•		n	
Calcium	541	2.50		31	11	MMG	•		N S	
hromium	2.07	0.500	н	***		MMG	•	•	172	
Cobalt	ND	2.50	W		H	MMG	•	•	н	
Copper	24.6	0.500		11		MMG	•			
on	1140	2.50				MMG	•	•		
ead	ND	2.50	•			MMG	•	•		
ithium	ND	2.50	**	н		MMG	•	•		
agnesium	56.4	2.50			и	MMG	•	•		
anganese	5.78	2.50	11	ü		MMG	•	W	v	
olybdenum	5.40	2.50				MMG	10	•		
ickel	ND	2.00				MMG	•	•		
otassium	91.6	15.0		11	.,	MMG			M.	
elenium	ND	2.50	W.			MMG		**		
lver	ND	0.250	2 11		ü	MMG		•		
odium	134	5.00	n	**		MMG	W			
rontium	ND	2.50	•			MMG				
nallium	ND	2.50	w			MMG	*		ж	
1	ND	5.00	n		•	MMG	H ·			
tanium	8.28	2.50	10	11	N.	MMG			in .	
nadium	ND	2.50				MMG			и	
nc	177	2.50			,,	MMG				
nc Iosphorus	36.9	2.50				MMG		*	11	
ospilorus	30.3	2.00				,				





Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

Metals by EPA 6000 Series Methods ICP-AES - Quality Control

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 6K07043 - EPA 3050B						C		44 100 14 6		MSCAN
Blank (6K07043-BLK1)					Prepared:	11/04/16	Analyzed	1: 11/09/10		MOOAN
Aluminum	ND	2.50	ug/wipe							
Antimony	ND	2.50	-							
Arsenic	ND	2.50								
Barium	ND	0.500								
Beryllium	ND	0.200								
Soron	ND ND	2.50 0.500								
admium	ND	2.50								
alcium	ND	0.500								
hromium	ND	2.50								
obalt	ND	0.500								
opper	ND	2.50								
on	ND	2.50								
ead	ND	2.50								
agnesium	ND	2.50								
anganese	ND	2.50								
olybdenum	ND	15.0								
otassium	ND	2.00								
ckel	ND	2.50								
elenium	ND	0.250								
lver	ND	5.00								
odium	ND	2.50								
rontium	ND	2.50								
allium	ND	2.50								
anium	ND	2.50								
nadium	ND	2.50								
ic	NU	2.50			Propara	d. 11/04/	Anaka	zed: 11/09	<i>M</i> 6	MSCAI
CS (6K07043-BS1)				4.00						
uminum	1.03		mg/kg	1.00		103				
timony	1.04			1.00		104				
senic	1.04			1.00		104				
rium	0.991			1.00		99.				
ryllium	0.997			1.00		99.7				
ron	0.954		*	1.00	l.	95.4				
dmium	1.05			1.00		105				
lcium	1.02			1.00		102				
romium	0.955			1.00)	95.	5 85-1	115		
balt	1.02			1.00)	103	2 85-1	115		
pper	0.952			1.00)	95.	2 85-	115		
n	0.978			1.00		97.				
ad	1.02		и	1.00		10				
gnesium	1.01		и	1.00		10				
nganese	0.977			1.00		97.				
lybdenum	1.05		u							
assium				1.00		10		115		
assiuiii	1.02		••	1.00)	10	2 85.	115		

Tue .T...



6500 Sunplex Drive Ocean Springs, MS 39564 228-875-6420 Phone 228-875-6423 Fax

Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

Metals by EPA 6000 Series Methods ICP-AES - Quality Control

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 6K07043 - EPA 3050B							AL Shir			
LCS (6K07043-BS1)					Prepared:	11/04/16	Analyzed:	11/09/16		MSCAN
Nickel	1.04		mg/kg	1.00	-	104	85-115			
Selenium	1.03		"	1.00		103	85-115			
Silver	1.05			1.00		105	85-115			
Sodium	1.03		W	1.00		103	85-115			
Strontium	1.03			1.00		103	85-115			
Thallium	1.00		11	1.00		100	85-115			
itanium	1.01		**	1.00		101	85-115			
/anadium	1.01			1.00		101	85-115			
Zinc	0.980		u	1.00		98.0	85-115			





Barbara Weckesser 1502 Cherokee Pascagoula MS, 39581 Project: Sand Blast Dust

Project Number: [none]

Project Manager: Barbara Weckesser

Reported: 11/16/16 10:34

Laboratory Accreditations/Certifications

Code	Description	Number	Expires
C01	La Environmental Lab Accreditation Program	01960	06/30/2017
C02	National Environmental Lab Accreditation Program	TNI01397	06/30/2017
C02	Ms Dept of Health (Coliform)	MS00021	12/31/2016
	Ms Dept of Health (Drinking Water Certificate)	MS00021	12/31/2016
COF	Ms DEQ Lead Firm Certification	PBF-00000028	10/16/2017
C05	MsDEQ Asbestos Inspector : C.D. Bingham	ABI-00001348	03/10/2017
C06	MsDEQ Air Monitor : C.D. Bingham	AM-011572	04/22/2017
C07	MsDEQ Ashestos Inspector: C. W. Meins	ABI-00001821	09/29/2017
C08	And the state of t	AM-011189	04/22/2017
C09	MsDEQ Air Monitor: C.W. Meins	ABI-00001345	03/10/2017
C12	MsDEQ Asbestos Inspector : H.P. Howell		03/18/2017
C14	MsDEQ Lead Paint Inspector : C.D. Bingham	PBI-00003690	
C15	MsDEQ Lead Paint Inspector : C.W. Meins	PBI-00001740	03/18/2017

Report Definitions

TNC	Too Numerous To Count
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the minimum reporting limit
NR	Not Reported
RPD	Relative Percent Difference
ICV	Initial Calibration Verfiication
CCV	Continuing Calibration Verification Standard
SSV	Secondary Source Verfication Standard
LCS	Lab Control Spike - Lab matrix prepared with known concentration of analyte/s of interest analyzed by method.
MS	Matrix Spike - Sample prepared with known concentration of analyte/s of interest analyzed by method.
MSD	Matrix Spike Duplicate - Duplicate sample prepared with known concentration of anlayte/s of interest analyzed by method.
MRL	Minimum Reporting Limit
%REC	Percentage Recovery of known concentration added to matrix
Batch	Group of samples prepared for analysis not to exceed 20 samples.
Matrix	Material containing analyte/s of interest
Surrogate	Analyte added to sample to determine extraction efficiency of method.
	The state of the s



Barbara Weckesser 1502 Cherokee Project: Sand Blast Dust

Project Number: [none]

Reported: 11/16/16 10:34

Pascagoula MS, 39581

Project Manager: Barbara Weckesser

Analyst Initials Key

FullName	<u>Initials</u>
Barbara K. McMillan	BKM
Charles D. Bingham	CDB
Michelle M Gallegos	MMG
Sarah E. Tomek	SET
Teresa Meins	TKM
Tina Tomek	TPT

Chain of Custody Record

EPA Lab ID# MS00021 LELAP ID # 01960 TNI ID # TNI01397

	Print For
1	

M-M Lab WO# 14/1105

(228) 875-6420 FAX (228) 675 C		Turn Around Time & Reporting	
www.micromethodslab.com	Project Manager:	Our normal turn around time is 10 working days	
Company Name: RA WECKESSER Address: 1502 CHEROKEE Clay AS AGOULA MS Zip: 29581 Phone: 51-480-2204 Fax:	Purchase Order #: Email Address: Avancy girl barb & att. met Sampler Name Printed Warres D. Bur Guar	Normal	
251-680- 209	Sampler Name Signed her O (25)		
rax.	List Analyses Requested	Field Testing / QC Reporting	
Project Name: Sand Blast Dust Project #: Sampling Matri		Field pH Collect Time ReadTime Field D.O Collect Time Read Time Field Temp Collect Time Read Time 2C Level: Level 1	
Sample Identification Date/Time Code	de #	Matrix Codes: Preservation Codes:	
SAND BLAST DUST 11.4-16 Driver Side back Window 10:00 AM HOOD 14/14/14 1000		W = Water DW = Drinking Water S = Solid SO = Soil SE = Sediment L = Liquid A = Air O = Oil SL = Sludge Suffer	
		Special Instructions / Comments	
Relinquished by Charles i) Broche Keceived by XIVIII TOWN ON	Signature Company Date Time The Win 11/4/16 1016	100 square cm pd\$ 16000 (8) CK# 866	
Received by Relinquished by	mah 40 met MM 14/16 10/16	Received on Ice? Yes No	
Received by		Receipt Temp (°C)SampleBlank	
Relinquished by		Cooler # Thermometer #	
Received by		Date & Time	
DCN# F316 Rev.#3	Physical Address: 6500 Sunplex Drive, Ocean Springs, MS 39564	Ву:	

Implementation Date: 7/18/11	Micro-Methods I		DCN: 5207
implementation Date: //18/11	Log-In Che	cklist	DCN: F207 Date Revised: 7-18-11
	-		Revision: 4
			Kevision. 4
Client <u>B. W.CKLSS</u> Date/Time Received	/ /		
Cooler ID Ice Present Yes/No	Temperature Thermo	ometer ID Cu	stody Sealed Custody Seal Intact Yes/No Yes/No
If not iced, were samples	received within one hour	r of collection?	Ycs No N/A e taken from cooleror bottle_
Multi Cooler shipment: Il	D of samples in coolers t	hat exceed 6°C	C taken Aem ees
Custody Seals on Bottles	Present	Yes No≭	
Containers Intact		Yes X No_	_,
Proper Containers for Re	anacted Analysis	Yes × No_	
Proper Containers for Re	questeu Anatysis		
Correct Preservation Use	d for All Samples	Yes X No	_
Correct Preservation Use	lucie Doqueetad	Yes X No_	
Adequate Sample for Ana		The state of the s	
Volatile Vials Headspace		iameter Yes Yes ⊀No	_ No N/A <u>X</u>
Chain of Custouv Form Included			-
Chain of Custody Forms	Chain of Custody Form Complete		
Chain of Custody Form C	complete		-
Chain of Custody Form C	complete coperly Relinquished	Ves X No	- - NI/A :X
Chain of Custody Form C Chain of Custody Form P	omplete roperly Relinquished actions Included	Yes X No Yes No	
Chain of Custody Form C Chain of Custody Form P	omplete roperly Relinquished actions Included	Yes No_ Yes No_ Yes No >	ζ
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Somples Missing on COC	complete roperly Relinquished actions Included or From Cooler	Yes X No Yes No	ζ
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels	complete roperly Relinquished actions Included or From Cooler Match COC	Yes	<u> </u>
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels	complete roperly Relinquished actions Included or From Cooler Match COC	Yes	<u> </u>
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels	complete roperly Relinquished actions Included or From Cooler Match COC	Yes	<u> </u>
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T	Yes No_ Yes No_ Yes No_ Yes No_ Yes Yes Yes Yes Yes Yes Yes Yes	NoN/A <u> </u>
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of	complete roperly Relinquished uctions Included or From Cooler Match COC Holding Time f Rush/Short Holding T	Yes No	NoN/A / _
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log.	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance crite	Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log.	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance crite	Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log.	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance criter Contacted By	Yes No Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log. Client Contacted Client Instructions: Canc Proce	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance criter Contacted By el Work Order eed with Work Order	Yes No Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do Da (Data with	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log.	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance criter Contacted By el Work Order eed with Work Order	Yes No Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do Da (Data with	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log. Client Contacted Client Instructions: Canc Proce	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance criter Contacted By el Work Order eed with Work Order	Yes No Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do Da (Data with	No NoN/A
Chain of Custody Form C Chain of Custody Form P Field Sheets/Special Instru- Samples Missing on COC Sample Container Labels Samples Received Within Dept. Manager Notified of Does work order meet Mic Note: Samples that do not Log. Client Contacted Client Instructions: Canc Proce	complete roperly Relinquished actions Included or From Cooler Match COC Holding Time f Rush/Short Holding T cro Methods sample act t meet acceptance criter Contacted By el Work Order eed with Work Order	Yes No Yes No Yes No Yes No Yes No Yes Yes Times Yes Ceptance criter ria must be do Da (Data with	No NoN/A







NAME	ADDRESS
Davik Dominguez	Passagocia, MS, 39581
W. R. PERRY Dom Cel	618 MARTIN ST POSEDCULI MS 39581
margie Shropshire	1402 Cherekee Dr Pascagoulams 39581
Jurja vilson	1402 Cherekee Dr Pascaspula 39581
Joanita Chavarria	1517 Cherokee St Pascagovia, 39581
Samue Moore	4610 Mohawk Aul Pascagnul Mys
Tiffamy Floyd	4610 Mihawk Aul Pascall Was 39581
huz Ruiz	4611 Mohawk Ave Pascagoula 39581
DRAKEFORS ANDERSON	1311 ChEROKEE DR. PASCAGOWA 39581
Ernie Denmark	1303 Cheo Kee Dr. PASCOGOUZIMS
Carros Lott Sv.	1207 Chorokee St. Pascagola 39581
Cassandra Muller	4506 Navaho At Pascagoula ms
QUY TEAN	1207 PAWNEE ST PAS, MS39581
Augen Tran	1207 Lawner St. Pascagoula MS 39581.
Thuy Cao	1207 Panne et Pascagoula 181