FLORIDA DEPARTMENT OF Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

June 7, 2022

Sent electronically to: andrew.knaggs@pacem-solutions.com

Mr. Andrew Knaggs, CEO
PACEM Defense, LLC
4700 Providence Road
Perry, Florida 32347

SUBJECT: **Department of Environmental Protection v. PACEM Defense, LLC**
OGC File No. 21-0988
EPA/DEP ID: FLR000201186

Dear Mr. Knaggs:

Enclosed is a copy of the executed Consent Order to resolve Case Number 21-0988.

The effective date of this Order is June 7, 2022, and all time frames will be referenced from this date.

As a reminder, a Consent Order is a binding legal document and was voluntarily entered into by both parties.

Should you have any questions concerning the Consent Order, please contact Cheryl Mitchell, at 904) 256-1620, or via email at Cheryl.L.Mitchell@FloridaDEP.gov. Your continued cooperation in the matter is appreciated.

Sincerely,

James R. Maher

James R. Maher, PE
Assistant Director

Enclosure: Executed Consent Order

ec: Bryan Hare (bryan.hare@pacem-defense.com);
Joseph Schmitz (joseph.schmitz@pacem-solutions.com);
FDEP-NED: Lea Crandall, Agency Clerk; Arlene Wilkinson, DEP_NED

FLORIDA DEPARTMENT OF Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

May 23, 2022

Sent electronically to: andrew.knaggs@pacem-solutions.com

Mr. Andrew Knaggs, CEO
PACEM Defense, LLC
4700 Providence Road
Perry, Florida 32347

SUBJECT: **Department of Environmental Protection v. PACEM Defense, LLC**
OGC File No.: 21-0988
EPA/DEP ID: FLR000201186

Dear Mr. Knaggs:

The State of Florida Department of Environmental Protection ("Department") finds that PACEM Defense, LLC ("Respondent") failed to make complete HW determinations; failed to properly label and close hazardous waste containers; failed to conduct and fully document weekly inspections of hazardous waste accumulation areas; failed to ensure that hazardous waste accumulation areas had all the required equipment; failed to maintain adequate aisle space in hazardous waste accumulation areas; failed to make emergency arrangements and maintain documentation of those arrangements; failed to train its employees in hazardous waste management and emergency procedures; failed to properly manifest and dispose of hazardous waste; failed to properly label and manage universal waste lamps; failed to provide adequate secondary containment for used oil; and failed to properly manage its used oil filters. This is in violation of the rules and statutes cited in the attached Warning Letter (WL21-201), and described in greater detail in the attached Inspection Report. Before sending this letter, the Department requested that the Respondent undertake certain actions to resolve the violations. These actions have since been completed. However, due to the nature of the violations, the Respondent remains subject to civil penalties. The Respondent is also responsible for costs incurred by the Department during the investigation of this matter.

The Department's Offer

Based on the violations described above, the Department is seeking $34,692.00 in payment and $500.00 for costs and expenses the Department has incurred in investigating this matter, which amounts to a total of $35,192.00. The civil penalty in this matter includes three violations of $2,000.00 or more.

However, in lieu of paying the full civil penalty, the Department has determined that up to $26,019.00 of the civil penalty may be offset through implementation of a Pollution Prevention Project (P2 Project), described in the attached Exhibit, which must be approved by the Department. This amount is referred to as the "offset amount."

Respondent's Acceptance

If you wish to accept this offer and fully resolve the enforcement matter pending against the Respondent, please sign this letter and return it to the Department at 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida, 32256, by June 3, 2022. The Department will then countersign it and file it with a designated clerk of the Department. Once the document is filed with the designated clerk, it will constitute a final order of the Department pursuant to Section 120.52(7), Florida Statutes (F.S.), and will be effective unless a request for an administrative hearing is filed by a third party in accordance with Chapter 120, F.S., and the attached Notice of Rights.

By accepting this offer you, Mr. Andrew Knaggs:

(1) certify that you are authorized and empowered to negotiate, enter into, and accept the terms of this offer in the name and on behalf of Respondent;
(2) acknowledge and waive Respondent's right to an administrative hearing pursuant to Sections 120.569 and 120.57, F.S., on the terms of this offer, once final; and
(3) acknowledge and waive Respondent's right to an appeal pursuant to Section 120.68, F.S.

The Department acknowledges that the Respondent's acceptance of this offer does not constitute an admission of liability for the violations referenced above.

Respondent's Performance

After signing and returning this document to the Department:

(1) Upon signing this letter, you must submit a completed P2 Project Plan within 60 days of the effective date of this Agreement using the requirements identified in the attached P2 Project Plan Exhibit. You must begin the P2 Project within 30 days after receiving the Department's approval, submit a Progress Report within 180 days after receiving the Department's approval, fully complete the P2 Project, and submit a Final Report using the requirements identified in the

attached P2 Project Final Report Exhibit within 365 days after the Department's approval. Your failure to timely start or complete the P2 Project, or timely provide the Department with the Final Report as described in the attached Exhibits, will cause the P2 Project option to be forfeited and the balance of the civil penalty shall be due within 10 days of notice from the Department.

(2) Respondent shall pay 25% of the penalty ($8,673.00) as well as $500.00 in Department costs, which amounts to $9,173.00. The total amount is to be paid in 36 monthly payments beginning July 1, 2022, and continuing every month thereafter on the first day of the month, until the entire amount has been paid in full. The first monthly payment, due on July 1, 2022, is to be $741.00. Each of the subsequent monthly payments is to be $241.00, and the final payment is to be $238.00. Failure to timely make any installment payment will enable the Department, at its discretion, to accelerate the remaining balance to become immediately due.

(3) Respondent shall make all payments required by this Order by cashier's check, money order or on-line payment. Cashier's check or money order shall be made payable to the "Department of Environmental Protection" and shall include both the OGC number assigned to this Order (OGC #21-0988) and the notation "Water Quality Assurance Trust Fund." Payment shall be sent to the Department of Environmental Protection, 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida, 32256. Online payments by e-check can be made by going to the DEP Business Portal at: http://www.fldepportal.com/go/pay/. It will take a number of days after this Agreement is final and effective, by filing with the Clerk of the Department, before ability to make online payment is available.

(4) If any balance remains after the entire P2 Project implementation cost is applied to the allowable portion of the civil penalty, Respondent shall pay the difference within 30 days of written notification by the Department to Respondent that the balance is due.

The Department may enforce the terms of this document, once final, and seek to collect monies owed pursuant to Sections 120.69 and 403.121, F.S.

Until clerked by the Department, this letter is only a settlement offer and not a final agency action. Consequently, neither the Respondent nor any other party may request an administrative hearing to contest this letter pursuant to Chapter 120, F.S. Once this letter is clerked and becomes a final order of the Department, as explained above, the attached Notice of Rights will apply to parties, other than the Respondent, whose interests will be substantially affected.

Electronic signatures or other versions of the parties' signatures, such as .pdf or facsimile, shall be valid and have the same force and effect as originals. No modifications of the terms of this Order will be effective until reduced to writing, executed by both Respondent and the Department, and filed with the clerk of the Department.

Please be aware that if the Respondent declines to respond to the Department's offer, the Department will assume that the Respondent is not interested in resolving the matter and will proceed accordingly.

If you have any questions, please contact Cheryl L. Mitchell at (904) 256-1620, or Cheryl.L.Mitchell@floridadep.gov.

Sincerely,

James R Maher

James R. Maher, PE
Assistant Director

FOR THE RESPONDENT:

I, Andrew Knaggs, **HEREBY ACCEPT THE TERMS OF THE AGREEMENT OFFER IDENTIFIED ABOVE.**

By: Andrew F Knaggs Date: 6/1/2022
[Signature]

Title: Chief Executive Officer, PACEM Defense, LLC.
[Type or Print]

FOR DEPARTMENT USE ONLY

DONE AND ORDERED this 7th day of June 2022, in Duval County,Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Gregory J. Strong
District Director

Filed, on this date, pursuant to section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

June 7, 2022
Date

Attachments: Notice of Rights
P2 Project Plan Exhibit
P2 Project Final Report Exhibit
Warning Letter WL21-201 and Inspection Report

Final clerked copy furnished to:
Lea Crandall, Agency Clerk (Lea.Crandall@floridadep.gov)
Arlene Wilkinson, FDEP NED (Arlene.Wilkinson@floridadep.gov)

ATTACHMENT

NOTICE OF RIGHTS

NOTICE OF RIGHTS

Persons who are not parties to this Order, but whose substantial interests are affected by it, have a right to petition for an administrative hearing under Sections 120.569 and 120.57, Florida Statutes. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition concerning this Order means that the Department's final action may be different from the position it has taken in the Order.

The petition for administrative hearing must contain all of the following information:

a) The OGC Number assigned to this Order;
b) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding;
c) An explanation of how the petitioner's substantial interests will be affected by the Order;
d) A statement of when and how the petitioner received notice of the Order;
e) Either a statement of all material facts disputed by the petitioner or a statement that the petitioner does not dispute any material facts;
f) A statement of the specific facts the petitioner contends warrant reversal or modification of the Order;
g) A statement of the rules or statutes the petitioner contends require reversal or modification of the Order; and
h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Order.

The petition must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS# 35, Tallahassee, Florida 32399-3000 within 21 days of receipt of this notice. A copy of the petition must also be mailed at the time of filing to the District Office at the address indicated above. Failure to file a petition within the 21-day period constitutes a person's waiver of the right to request an administrative hearing and to participate as a party to this proceeding under Sections 120.569 and 120.57, Florida Statutes. Mediation under Section 120.573, Florida Statutes, is not available in this proceeding.

ATTACHMENT

P2 PROJECT PLAN EXHIBIT

[This template must be completed to describe P2 Projects once identified. The document must be approved prior to P2 Project implementation. The Plan must contain the following information.]

Exhibit A
P2 Project Plan (Plan)
(Note: Provide the information specified and delete existing text within parentheses)
(Facility Name)
(Address)
(Telephone)
(Preparer Name/Title)

A. **Project Description**: (Summarize P2 Projects selected. Describe the processes or operations to be modified, and the specific changes to be made. Include details such as the specific equipment to be installed, materials to be substituted, and the actual changes to be made to processes or operations. Include manufacturer or vendor information, and specifications.)

B. **Environmental and Economic Benefits**: (Explain why and how each Project proposed constitutes P2.

Specify how each material, chemical, water and energy is saved, and from which processes or operations. Specify how each solid and hazardous waste, industrial wastewater and air emissions are generated, the waste type, and from which processes or operations. **Describe generally in paragraph format.**

Estimate the *annual* savings in *resources* - raw materials, chemicals, water, and energy at the process or operation front end. Estimate the *annual* reductions in *wastes* - solid and hazardous waste, wastewater, and air emission reductions at the process or operation back end.

(Project Name)							
Annual Resource Consumption Comparison							
Item	Quantity Used (gal/lb./kwh-**specify**)			Purchasing Cost ($)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Water							
Chemicals							
Materials							
Energy							
Total Annual Cost Savings =							
Annual Waste Generation Comparison							
Item	Quantity Generated (gal/lb./tons-**specify**)			Disposal Cost ($)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Hazardous Waste							
Industrial Wastewater							
Solid Waste							
Air Emissions							
Total Annual Cost Savings =							
Total Annual Avoided Cost Savings =							

Figures quoted should represent weights or volumes annually and should be equalized for production rate changes. Associated cost savings should be included. **Describe specifically using the tables provided.**

Complete the first table for each per Project individually. Add or average corresponding figures from each Project table to complete the Plan table, *for multiple Projects*.)

Summary of All P2 Projects							
Annual Resource Consumption Comparison							
Item	Quantity Used (gal./lb./kwh-**specify**)			Purchasing Cost ($)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Water							
Chemicals							
Materials							
Energy							
Total Annual Cost Savings =							
Annual Waste Generation Comparison							
Item	Quantity Generated (gal./lb./tons-**specify**)			Disposal Cost ($)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Hazardous Waste							
Industrial Wastewater							
Solid Waste							
Air Emissions							
Total Annual Cost Savings =							
Total Annual Avoided Cost Savings =							

C. **Project Cost**: (Include per Project the itemized, subtotal and Project total costs. A projected payback period in months or years needs to be included.

Provide a grand total cost for all Projects and an averaged projected payback period, *for multiple Projects*. **Use list or table format for all**.)

D. **Implementation Schedule: (**Provide a brief discussion of the steps necessary to implement the Projects and expected time frames for completion. A table or list format is preferred. The schedule shall include a list of milestones with dates, or timeframes based on Plan approval date, including Progress and Final Report submittals. Provide a description of any anticipated problems and options.)

E. **Project Reporting:**

1. Within **_180_** days of approval of the Project Plan, the Respondent shall submit a P2 Project Progress Report to the Department that describes the Respondent's progress in implementing the P2

Project and meeting the requirements in the Plan, and includes a list of equipment ordered, purchased, and/or installed.

2. Within **365** days of the approval of the Project Plan, the Respondent shall submit to the Department a P2 Project Final Report that includes the following:

a. A confirmation that the information presented in Sections A-C of the Summary is unchanged, or an updated version with the sections changed appropriately. A statement that the Project(s) was/were implemented successfully. An explanation of any problems encountered, and corrections applied.

b. Attached expense reports, receipts, purchasing instruments and other documents itemizing costs expended on preparing and implementing the Project.

3. The Department shall review the Final Report and determine:

a. Whether the project was properly implemented; and

b. Which expenses apply toward pollution prevention credits.

4. A $1.00 pollution prevention credit for each $1.00 spent on applicable costs will be applied against the portion of the civil penalty that can be offset.

a. The following costs are allowable to offset the allowable amount of the civil penalty:

i. Preparation of the P2 Project;

ii. Design of the P2 Project;

iii. Installation of equipment for the P2 Project;

iv. Construction of the P2 Project;

v. Testing of the P2 Project;

vi. Training of staff concerning the implementation of the P2 Project; and

vii. Capital equipment needed for the P2 Project.

b. The following costs shall not apply toward P2 credit:

i. Costs incurred in conducting a waste audit;

ii. Maintenance and operation costs involved in implementing the P2 Project;

iii. Monitoring and reporting costs;

iv. Salaries of employees who perform their job duties;

v. Costs expended to bring the facility into compliance with current law, rules and regulations;

vi. Costs associated with a P2 Project that is not implemented;

vii. Costs associated with a P2 Project that has not been approved by the Department; and

viii. Legal costs.

c. If any balance remains after the entire P2 credit is applied to the allowable portion of the civil penalty, Respondent shall pay the difference within 30 days of written notification by the Department to the Respondent that the balance is due.

5. The Department may terminate the P2 Project at any time during the development or implementation of it, if the Respondent fails to comply with the requirements in this document, act in good faith in preparing and implementing the project, or develop and implement the P2 Project in a timely manner. The Respondent may terminate the P2 Project at any time during its development or implementation.

ATTACHMENT

P2 PROJECT FINAL REPORT EXHIBIT

[**Reporting for P2 Projects should be done using this template.** The Progress or Final Report must contain the following applicable information – with any changes from that presented in the original Summary or Plan.]

P2 Project Progress/Final Report (Report)

(Note: Provide the information specified and delete existing text within parentheses)

(Facility Name)
(Address)
(Telephone)
(Preparer Name/Title)

A. **Project Description**: (*Confirm that the Project(s) were implemented as originally described in the P2 Project Summary/Plan, or explain and justify any changes made.* Summarize any changes made from the original description by revising details for equipment installed, materials substituted, and the actual changes made to processes or operations. Include any changed manufacturer or vendor information, and specifications.)

B. **Environmental and Economic Benefits**: (*Confirm that the natures and types of resources, and wastes predicted to be effected in the original Summary/Plan, are unchanged. Describe and explain any notable changes in resources saved up front, or wastes reduced at back of affected processes, or operations.* Specify the types and nature of each change. Update the original table, as applicable.)

Insert the original table(s) from this Section of the Summary or Plan. Update information for any changed resource or wastes. *Correct numbers presented in the table(s) for any parameters actually monitored – only if results monitoring was included as part of implementation in the original Summary or Plan.*)

C. **Project Cost**: (Include per Project the *actual* itemized, subtotal and project total costs realized for each element and component of the project – *including any changed items or costs*. The projected payback period in months or years needs to be confirmed or corrected.

Provide a grand total cost for all Projects and an averaged projected payback period, *for multiple Projects*. **Use list or table format for all.**)

D. **Project Reporting:**

(***Indicate both the dates the Project was started and completed.*** Confirm that the information presented in Sections A-C of the Plan is unchanged, or that sections have been changed appropriately. Provide a statement that the Project(s) was/were implemented successfully, and explanation of potential problems and corrections applied. Attach expense reports, receipts, purchasing instruments and other documents itemizing costs expended on preparing and implementing the Projects.)

ATTACHMENT

WARNING LETTER WL21-201 and INSPECTION REPORT

FLORIDA DEPARTMENT OF Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

October 1, 2021

Sent electronically to: james.burt@pacem-defense.com

Mr. James Burt, Director of HSE and Facilities
PACEM Defense – AMTEC Less Lethal
4700 Providence Road
Perry, Florida 32347

RE: Warning Letter WL21-201 (Significant Non-Complier)
PACEM Defense – AMTEC Less Lethal
EPA/DEP ID: FLR000201186
Taylor County – Hazardous Waste

Dear Mr. Burt:

A hazardous waste compliance inspection was conducted at your facility on June 16, 2021. During this inspection, possible violations of Chapters 376 and 403, Florida Statutes (Fla. Stat.), and Chapters 62-710 and 62-730, Florida Administrative Code (Fla. Admin. Code), were observed.

During this inspection, Department personnel noted the following:

1. The facility failed to make a complete hazardous waste determination on four (4) waste streams;

2. The facility failed to keep three (3) hazardous waste satellite containers closed;

3. The facility failed to properly label and/or mark 20 hazardous waste satellite containers;

4. The facility failed to ensure that two (2) hazardous waste satellite accumulation areas had all the required equipment;

5. The facility failed to conduct and fully document weekly inspections of its hazardous waste accumulation areas;

6. The facility failed to properly label and/or mark 14 hazardous waste accumulation containers;

7. The facility failed to label four (4) hazardous waste accumulation containers with the accumulation start date;

8. The facility failed to ensure that two (2) hazardous waste accumulation areas had all the required equipment;

9. The facility failed to maintain adequate aisle space to allow for inspections in one of its hazardous waste accumulation areas;

10. The facility failed to make emergency arrangements and maintain documentation of those arrangements with local authorities;

11. The facility failed to ensure that all its employees were thoroughly familiar with hazardous waste management procedures and emergency procedures;

12. The facility failed to properly manifest and dispose of nine (9) hazardous waste accumulation containers;

13. The facility failed to properly label three (3) boxes of universal waste lamps;

14. The facility failed to properly manage four (4) full boxes of universal waste lamps within one (1) year of accumulation;

15. The facility failed to provide adequate secondary containment for five (5) containers of used oil; and

16. The facility failed to properly manage its used oil filters and had disposed of them in the trash.

Violations of Florida Statutes or administrative rules may result in liability for damages and restoration, and the judicial imposition of civil penalties, pursuant to Sections 376.121 and 403.121, Florida Statutes.

Please contact Cheryl L. Mitchell at (904) 256-1620, or via email at Cheryl.L.Mitchell@FloridaDEP.gov, within 15 days of receipt of this Warning Letter to arrange a meeting to discuss this matter. The Department is interested in receiving any facts that you may have which might assist in determining whether any violations have occurred. You may bring anyone with you to the meeting that you feel could help resolve this.

Please be advised that this Warning Letter is part of an agency investigation, preliminary to agency action in accordance with Section 120.57(5), Florida Statutes. We look forward to your cooperation in completing our investigation and resolving this as soon as possible.

Sincerely,

Gregory J. Strong
District Director

Attachment: Final Inspection Report

ec: PACEM: Andrew Knaggs, (andrew.knaggs@pacem-solutions.com)
Bryan Hare, (bryan.hare@pacem-defense.com)
Joseph Schmitz, (joseph.schmitz@pacem-solutions.com)

FDEP-NED: Cheryl Mitchell
Bonnie Bradshaw
Joni Petry
DEP_NED

Florida Department of

Environmental Protection

Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: PACEM Defense - AMTEC Less Lethal Systems

On-Site Inspection Start Date: 06/16/2021 **On-Site Inspection End Date:** 06/16/2021

ME ID#: 106739 **EPA ID#:** FLR000201186

Facility Street Address: 4700 Providence Rd, Perry, Florida 32347-1140

Contact Mailing Address: 4700 Providence Rd, Perry, Florida 32347-1140

County Name: Taylor **Contact Phone:** (850) 838-8445

NOTIFIED AS:

SQG (100-1000 kg/month)

WASTE ACTIVITIES:

Generator: SQG **Used Oil:** Used Oil, Oil Filters **Universal Waste: Indicate types of UW generated and/or accumulated at the facility: Generate/Accumulate:** Mercury Containing Lamps **Maximum quantity of UW handled or transported at any time:** Less than 5,000 kg (11,000 lbs); Small Quantity Handler (SQH)

INSPECTION TYPE:

Routine Inspection for SQG (100-1000 kg/month) Facility

Routine Inspection for Used Oil Generator Facility

INSPECTION PARTICIPANTS:

Principal Inspector: Cheryl L Mitchell, Inspector

Other Participants: James Burt, HSE and Facilities Director

LATITUDE / LONGITUDE: Lat 30° 12' 7.0033" / Long 83° 38' 59.0679"

NAIC: 332993 - Ammunition (except Small Arms) Manufacturing

TYPE OF OWNERSHIP: Private

Introduction:

PACEM Defense – AMTEC Less Lethal Systems (PACEM, the facility) was inspected June 16, 2021. The facility was last inspected by the Department's Hazardous Waste Program on March 12, 2015, when it was owned and operated by AMTEC Less Lethal Systems, Inc. (AMTEC). At the time of the 2015 inspection, AMTEC appeared to be operating as a Very Small Quantity Generator (VSQG) of hazardous waste although it had not disposed of any hazardous waste. AMTEC owned and operated the property and facility from August 2012 until PACEM Estate Holdings, LLC purchased the property and began operating the facility as PACEM in October 2018.

PACEM submitted an 8700-12FL notification to the Department as a SQG of hazardous waste that was dated December 15, 2020, and was received by the Department on February 10, 2021. The facility is currently operating as a SQG of hazardous waste. PACEM representatives Mr. Jim Burt (HSE) and Mr. Christian Salafia (Quality Engineer) were present throughout the inspection. PACEM representatives that participated in an inbrief and outbrief the day of the inspection included Mr. Andrew Knaggs (CEO), Mr. Bryan Hare (Operations Vice President), and Mr. Joseph Schmitz (Counsel) via video.

PACEM has been in operation at this location since 2018, has 75 employees, and is on well water and a septic system. The facility operates one shift from 6:00 AM to 4:30 PM Monday through Thursday and occasionally on Friday based on workload.

PACEM is a manufacturer of products primarily used by law enforcement officials. Products manufactured on-site include 12 gauge and 37 / 40 mm rounds, propellants, bean bags, rubber bullets, smoke grenades / cannisters, tear gas, and flashbangs. The facility also manufactures 2-chlorobenzalmalononitrile (CS),

an active ingredient used in tear gas, using orthochlorobenzaldehyde (OCBA) and malononitrile, referred to by the facility as “milano.”

The facility consists of an Administrative Office Building, Lunch and Breakroom Building, Nine Annex Buildings (#1 - #9), Magazine Buildings #10 - #12, Magazine A, Building #1 (former Impact Building), Building #2 (former Tactical Building), Building #3 (former Diversion Building), Warehouse, Maintenance Building, and Hazardous Waste Accumulation Areas (HWAAs). The areas inspected are described below.

PROCESS DESCRIPTION

NINE ANNEX BUILDINGS

The Annex Buildings are small, concrete block buildings that are located in the eastern portion of the property (Photo 1). Four of the buildings (#1, #3, #4, #5) are used for production; two (#2, #6) are used for heated storage of raw products; two (#7, #8) are used for storage for dyes, fuels (i.e., nitrocellulose), and oxidizers (i.e., ammonium nitrate), respectively; and one (#9) is used for storage of inert primers, fuses, and shell round casings.

ANNEXES #1, #3, #4, and #5 (all described in more detail below) are similar in building design, with sides A and B separated by a concrete block wall (except #3); a dust collection system that is connected to a Camfil Gold Series X-Flo filter cartridge dust collector located outside the buildings (except #5); and satellite accumulation of D001 hazardous waste debris (i.e., wipes, PPE and floor sweepings) from the production of CS powder and products that are mixed with CS powder. The facility is reminded that if malononitrile product is spilled it should be managed as U149 hazardous waste spill residue.

Annex #1A is used to containerize the CS powder that has been mixed with irritants and other materials in Annex #1B. The CS powder mixture is pressed into containers that are crimped closed. There were two 5-gallon satellite containers of hazardous waste debris accumulating. One container was not closed (Photo 2) [40 CFR 262.15(a)(4)]. Both containers were properly labeled with the words "Hazardous Waste," but neither container included an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. When full, the satellite containers are emptied into a 1-cubic yard (CY) lined, fiberboard accumulation container located at Annex #4 described below. Annex #1A has a trench drain that is located immediately inside the entrance, is approximately 10’ in length, and is used to collect mop water from all the annexes/buildings (Photo 3). The trench drain discharges into an underground 1,000-gallon concrete vault located immediately outside Annex #1A to the west. Mr. Burt stated that the wastewater from the vault had been disposed of once through Safety-Kleen as non-hazardous wastewater, but the disposal records could not be provided to the Department prior to completion of this report. The facility provided a current non-hazardous waste profile that was based on generator-knowledge but did not have any analytical data for this wastestream. Because the concentration of D001 CS powder mixtures that are mopped can vary depending upon the process in each annex and building, and the potential for D001/D003 hazardous waste debris from other buildings to also be included in the mop water, the facility had not made a complete and accurate waste determination [40 CFR 262.11]. The facility is reminded that if this wastestream is determined to be non-hazardous waste, this is an industrial wastewater that should not be disposed in the on-site septic system which discharges to the environment.

Annex #1B is the mixing room where small batches of CS are mixed with other materials (i.e., irritant and explosive powders) to various percentages depending on the device that will be produced. Floor sweepings are vacuumed up with the facility's Tiger-Vac floor vacuum. The facility manages the vacuum as a tool, described in a facility SOP, and empties the contents into a satellite container after each use. Mixing was in process at the time of the inspection and entry would have required Level A PPE to enter the room so the satellite container could not be inspected. Located outside Annex #1B is the dust collector filter house. There was one 55-gallon satellite drum underneath the dust collector (Photo 4). The drum was closed but was not properly labeled with the words "Hazardous Waste" and was not labeled with an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. Located in the same area as the baghouse was one 55-gallon drum that was open, unlabeled and was approximately 1/3-full of liquid waste (Photos 5 and 6) [40 CFR 262.11]. The facility should make an accurate hazardous waste determination on the contents of the drum, provide documentation to the Department, and properly dispose of the waste.

Annex #3 is a single room building where the CS is granulated/pulverized and then mixed with other materials (i.e., irritant and explosive powders) to various percentages depending on the device that will be produced. There were three 5-gallon satellite containers of hazardous waste debris accumulating. One container was not closed (Photo 7) [40 CFR 262.15(a)(4)]. The three containers were properly labeled with the words "Hazardous Waste," but none of the containers included an indication of the hazards of the contents [40 CFR 262.15(a)(5)].

When full, the satellite containers are emptied into a 1-CY lined, fiberboard accumulation container located at Annex #4 described below. Located outside Annex #3 on the east is the dust collector filter house. There was one 55-gallon satellite drum underneath the dust collector (Photo 8). The drum was closed but was not properly labeled with the words "Hazardous Waste" and was not labeled with an indication of the hazards of the contents [40 CFR 262.15(a)(5)].

Annex #4A is used to containerize the CS powder mixture that is mixed in Annex #4B. The mixture is then pressed into containers that are crimped closed. A petroleum-based lubricant, Mystik® JT-6® Hi-Temp Grease, is applied to the inside of containers with swabs. The swabs are non-hazardous but are managed as hazardous waste debris. Pine-Sol is used on wipes for cleaning that are also managed as hazardous waste debris. There was one 5-gallon satellite container of hazardous waste debris accumulating. The container had been closed but was opened by Mr. Burt at the request of the inspectors (Photo 9). The container was properly labeled with the words "Hazardous Waste" but did not include an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. When full, the satellite container is emptied into a 1-CY lined, fiberboard accumulation container located outside Annex #4B described below. Located immediately outside of Annex #4A is the dust collector filter house. There was one 55-gallon satellite drum underneath the dust collector (Photo 10). The drum was closed but was not properly labeled with the words "Hazardous Waste" and was not labeled with an indication of the hazards of the contents [40 CFR 262.15(a)(5)].

Annex #4B is used for mixing large batches of CS with other materials (i.e., irritant and pyrotechnic powders). There was one 5-gallon satellite container of hazardous waste debris accumulating. The container had been closed but was opened by Mr. Burt at the request of the inspectors (Photo 11). The container was properly labeled with the words "Hazardous Waste" but did not include an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. When full, the satellite container is emptied into a 1-CY lined, fiberboard accumulation container located immediately outside Annex #4B described below. There was one trash can in the room and it contained PPE, wipes, and other debris (Photo 12). Mr. Burt stated that the technicians are trained that general trash should only be used for debris that is not contaminated with the CS mixtures. This is an Area of Concern. Because the hazardous waste satellite container in the same room contained the same types of debris it could be confusing to technicians. The facility should ensure that personnel training includes descriptions and specific management procedures for these two wastestreams. Located immediately outside Annex #4B is a 1-CY lined, fiberboard accumulation container that is used to accumulate hazardous waste debris from satellite containers located in Annexes #1, #3, #4 and #5 (Photo 13). Because the container is used to collect hazardous waste debris from other annexes, it is not located ‘at or near the point of generation,’ and is greater than 55-gallons, it should be managed as an HWAA. The facility had a written waste tracking log on a clipboard that was placed on top of the closed container but was not attached to the container. The log includes the weight and date the waste was added to the container. No hazardous waste was accumulating at the time of the inspection. The facility is reminded that at the time that hazardous waste is added to the container, the container should be properly labeled with the words "Hazardous Waste," marked with an indication of the hazards of the contents, and labeled with the accumulation start date when waste was first added to the container. The facility is reminded that HWAAs should include required equipment such as a fire extinguisher, eyewash and a spill kit. This area did not have a spill kit.

Annex #5A is heated storage for OCBA and milano which are the raw materials used in the manufacture of CS. Annex #5B is a mixing room where OCBA and milano are mixed with ammonium hydroxide, a catalyst, to produce CS. No hazardous waste was accumulating at the time of the inspection.

ANNEXES #2 and #6 are used interchangeably to store and dry-out raw products including irritants, smokes, and CS powders. These buildings were not internally inspected due to the presence of the irritants that required Level A PPE for entry. These buildings are also used to store products that are on-hold pending assessment by an internal Materials Review Board (MRB) to determine whether the non-conforming material can be re-worked for further use or whether the material should be wasted. A Non-Conformance Report (NCR) is submitted to the MRB for the non-conforming products, and those products are labeled as ‘Hazardous Waste Materials’ while they are under review. Mr. Burt stated that the MRB process can take up to 90 days but that PACEM attempts to process these reviews within 30-40 days. The facility is reminded that non-conforming products that could be deemed “inherently waste-like,” based on PACEM’s technical/historical knowledge of similar non-conforming products, should be expedited through the MRB process so that a timely hazardous waste determination can be made.

ANNEXES #7, #8 and #9 are used for storage of materials used in the production process. Hazardous waste is not generated in these buildings.

PROCESS DESCRIPTION:
(continued)

MAGAZINE BUILDINGS #10, #11, #12, the MIXING WALL, MAGAZINE A

These structures are all located in the southern portion of the facility (Photo 14). Building #10 is used to prepare energetic ingredients that are used in flashbangs and other pyrotechnic products. Debris generated during the preparation process in Building #10 is managed as D001/D003 hazardous waste. There were three 5-gallon satellite containers of debris accumulating. The containers were closed and properly labeled with the words "Hazardous Waste," one container was also labeled as “Flammable,” but none of the containers were marked with an indication of the hazards of the contents (Photos 15 and 16) [40 CFR 262.15(a)(5)]. There were also expired NazDar silk screen inks stored in Building #10. SDSs provided for these inks indicate that they should be managed as D001 hazardous waste liquids. This is an Area of Concern. The facility should ensure that a waste determination is made on any expired products that cannot be used in production and the wastes should be properly containerized, labeled and disposed in a timely manner. After the ingredients are prepared in Building #10, they are containerized and placed in the mixer at the Mixing Wall (Photo 17). Due to the explosive rating on the materials, personnel operate the mixer remotely. No hazardous waste is generated in this area.

Buildings #11 and #12 were locked and not available for inspection, but Mr. Burt stated that they are used as dry storage for energetics, flash powder and explosives that are used in the manufacture of products assembled in Building #3. Mr. Burt stated that hazardous waste is not generated or accumulated in these buildings.

Magazine A is an earthern-covered magazine that was not available for inspection. Mr. Burt stated that it is used for storage of finished products, and hazardous waste is not generated or accumulated in the magazine.

BUILDING #1

Impact products (e.g., rubber bullets, bean bags) and small gauge shells are assembled on one side of the building and silk screens are applied to the products on the other side (Photo 18). The exterior packaging/shells and silk screen templates are purchased from outside vendors. CS powder and propellant are added to or pressed into each device. Small amounts of acetone may be added to the inside of the small gauge shells prior to pressing. Debris that has been in contact with the CS mixture is managed as D001 hazardous waste in 5-gallon satellite containers located at the work benches.

Ruco and NazDar silk screen inks are used. Consistency of the ink is adjusted with either silk screen wash or hardener and then dried in a UV light dryer. Review of the SDSs for the inks, wash and hardener indicate they would be non-hazardous waste once dry. IPA is used on wipes to clean the silk screens and are thrown in the trash.

There was a small Storage Room in the rear of building that is used for storage of products including inks, enamels, and adhesives. Review of SDSs for several of the inks and enamels indicated they would be D001 hazardous waste liquids when disposed. Sherwin Williams OPEX Red Lacquer (≤10% methyl ethyl ketone (MEK); flashpoint 21.2°F) is applied with a brush to seal and visibly mark the shells to indicate insertion of the propellant. Waste generated from use of this product could potentially be D035 hazardous waste and the facility should make an accurate hazardous waste determination on waste generated during use of this product [40 CFR 262.11].

BUILDING #2

Flashbangs and small caliber products (e.g., smoke candles) are assembled in this building. The operations conducted in this building are considered proprietary and photos were not allowed. The flashbangs are assembled in a series of three separate rooms located in the back of the building. The CS powder mixture is pressed into the flashbang casings inside an explosive-protective machine. IPA is used on wipes for cleaning. Debris generated in this portion of the building is managed as D001/D003 hazardous waste. There was one 5-gallon satellite container in each of the three rooms. Only one of the three containers was accumulating waste at the time of the inspection. The containers were closed and properly labeled with the words "Hazardous Waste," but none of the containers were marked with an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. In one of the rooms there was an open, approximately 15-gallon plastic bag of D001/D003 hazardous waste that appeared to have been used to collect the contents of two of the other satellite containers. This bag was not closed [40 CFR 262.15(a)(4)], was not properly labeled with the words "Hazardous Waste," and was not marked with an indication of the hazards of the contents [40 CFR 262.15(a)(5)].

Small caliber ammunition is assembled in the main room of this building. Cartridges are filled with CS powder and propellant and pressed together in small hydraulic presses. Debris generated in this portion of the building is managed as D001/D003. There were two 5-gallon satellite containers in the main room. No waste was accumulating at the time of the inspection. The containers were closed and properly labeled as “Hazardous Waste,” and both containers were labeled as "Flammable," but neither were marked with an indication of the hazards of the contents. There was one empty 5-gallon container labeled "Oily Waste Can" that appeared to be incorrectly labeled since Mr. Burt stated that rags used in this area are managed as hazardous waste. Defective cartridges that can’t be used are managed as D003/D008 hazardous waste. There were no satellite containers in the room for this wastestream at the time of the inspection. Mr. Burt stated that this wastestream is generated infrequently and that satellite containers are brought to the facility at the time defective cartridges are identified.

BUILDING #3

This building is used to produce 40 mm rounds and includes two separate rooms. The operations conducted in this building are considered proprietary and photos were not allowed.

The assembly process flows clockwise around the room. Cartridges are filled with propellant and then an explosive and the contents are hydraulically pressed into the cartridge inside an explosive-protective machine. Loctite 401 liquid is placed around the cartridge as a sealant and the cartridge pieces are crimped together. The cartridge is stenciled using Marsh RM50 inks, etched with a unique serial number, banded together, placed into metal canisters that are banded together, palletized and moved to the magazines. The etching machine is equipped with particulate filters that had not yet been disposed. The facility is reminded that a hazardous waste determination should be made prior to disposal of the filters. IPA is used on wipes and swabs for cleaning throughout the building. This debris as well as paint brushes, towels, and PPE are managed as D001/D003 hazardous waste "touch waste” in five 5-gallon satellite containers that were located at various workstations throughout the building. All the containers were closed and properly labeled with the words "Hazardous Waste" but were not marked with an indication of the hazards of the contents [40 CFR 262.15(a)(5)]. The back room, where two of the satellite containers were located, did not have the required equipment of a fire extinguisher or eyewash [40 CFR 262.15(a)(7)].

WAREHOUSE

This building is used to store raw materials and finished products. Materials are received and products shipped-out through the loading dock area on the east side of the building. Hazardous waste is not generated in this building, but one of the facility’s HWAAs is located inside this building and is further described below.

MAINTENANCE BUILDING

Routine maintenance on building equipment, machinery and landscaping equipment is performed in this building. Mr. Burt stated that maintenance on vehicles is performed off-site. A drill press, lathe, belt sander, and brake equipment are located in a separate room on the west side of the building (Photo 19). Metal shavings/grindings generated from metal work are thrown in the trash. The facility should either recycle these shavings as scrap metal or make a waste determination on the metal debris [40 CFR 262.11]. Acetone or IPA is used on wipes to clean surfaces. The wipes are collected in a 5-gallon step can and emptied into the regular trash.

On the east side of the building there is an open bay with a roll-up door where small equipment is brought inside for maintenance (Photo 20). The room is used for product storage and has a small abrasive media glove box. Mr. Burt stated that the glove box was used infrequently and waste had not yet been disposed. The facility is reminded that an accurate waste determination should be made at the time that waste media is collected for disposal.

There was one flammable locker in the east bay that contained a variety of aerosol paints and cleaners, latex paints, and other products. There was a 1-gallon can of Kleen Strip Methyl Ethyl Ketone (99-100% MEK; flashpoint 25°F) in the locker that Mr. Burt said was used infrequently for cleaning. There was also a small can of Oatey Clear PVC Cement (15-35% MEK; flashpoint 14°-23°F) in the locker. Wipes that are used with Kleen Strip MEK would be an F005 and potentially a D035 hazardous waste. Debris generated from use of the PVC cement, including the applicator swab, could potentially be a D035 hazardous waste. This is an Area of

Concern. The facility's current hazardous waste profiles do not include F005 or D035 waste codes. The facility should make an accurate hazardous waste determination on waste generated during use of these products. Alternatively, the facility may manage MEK-contaminated wipes and swabs as Excluded Solvent Contaminated Wipes (ESCW) as described in 40 CFR 261.4(a)(26) and 40 CFR 261.4(b)(18).

Aerosol can products are sometimes used for touch-up painting and cleaning small parts. Mr. Burt stated that after an aerosol product is spent, it is thrown into the trash. The facility is reminded that even when spent, aerosol cans may contain liquid product and/or flammable propellants which can cause the aerosol can to be a D001 and/or hazardous waste. Additionally, aerosol cans with broken or clogged nozzles may be considered a hazardous waste. Unless an aerosol can is completely empty of both liquid and propellant, as defined in 40 CFR 261.7, it should not be thrown into the trash. All unusable and spent aerosol cans should either be safely punctured and properly drained into a closed and properly labeled container, which should then be managed as hazardous waste, or be placed unpunctured into a closed and properly labeled container, which should then be managed as a hazardous waste. Alternatively, the facility may choose to manage hazardous waste aerosol cans as a universal waste, provided they meet the requirements of 40 CFR 273.

Used oil and used oil filters are generated during maintenance activities. Mr. Burt stated that the facility typically generates two to three drums of used oil each year. There were no used oil filters accumulating at the time of the inspection, but the maintenance technician stated that the shop's practice is to drain the oil filters and dispose of them in the regular trash dumpster on-site. This practice is not ensuring proper disposal of used oil filters [62-710.850(1), FAC].

Immediately outside the open bay area, on the concrete driveway, were eight 55-gallon drums on wooden pallets underneath a tarp (Photos 21 and 22). Five 55-gallon drums were labeled used oil. The used oil containers were closed and properly labeled but did not have adequate secondary containment [62-710.401(6), FAC]. Adjacent to and underneath a pallet of used oil drums there was a small area of stained concrete and soil observed (See Photo 22). This is an Area of Concern. There was water on top of the tarp that dripped onto the concrete and ground when the tarp was pulled off the drums, but this staining did not appear to be the result of that action. The facility should determine if this staining is the result of a used oil release, and if so, clean-up and properly manage the contaminated materials. Two of the 55-gallon drums in this area were labeled oily water, and one 55-gallon drum was labeled hazardous waste flash powder (Photo 23). The 55-gallon drum of hazardous waste was closed and properly labeled "Hazardous Waste" but did not include an indication of the hazards of the contents [40 CFR 262.16(b)(6)(i)(B)]. Because this drum was not being used as a satellite accumulation container in this location, the container should have been managed as an HWAA. The area had the required equipment, but the facility was not performing weekly hazardous waste container inspections and did not have documentation of the weekly inspections [40 CFR 262.16(b)(2)(iv), 62-730.160(3), FAC].

There is a small Maintenance Shed located adjacent to the Maintenance Building that is used for material and equipment storage, and for the accumulation of spent fluorescent lamps generated throughout the facility. The facility manages the spent lamps as universal waste. At the time of the inspection there were five full boxes of universal waste lamps accumulating (Photo 24). All the boxes were closed. Three of the boxes were not properly labeled with the words "Universal Waste Lamps," or "Waste Lamps," or "Used Lamps" [40 CFR 273.14(e), 62-737.400(5)(b), FAC]. One box was dated 4/1/21 and had been accumulating for less than one year; one box was dated 2/25/20 and had been accumulating for more than one year (Photo 25) [40 CFR 273.15(a)]; and three boxes were not dated so that the time of accumulation could not be determined and the facility did not have an inventory to demonstrate that the lamps had been accumulating for less than one year [40 CFR 273.15(a)]. Veolia (FL0000207449) manages the universal waste lamps. Mr. Burt stated that the facility typically generated approximately one or two boxes of waste lamps each year, but a recent project had replaced the fluorescent lamps with LED fixtures and additional boxes of waste lamps were generated.

Scrap metal generated throughout the facility is collected in small bins located around the facility and is managed by The Recycling Center Inc. located in Perry.

HAZARDOUS WASTE ACCUMULATION AREAS (HWAAs)

The facility currently has four HWAAs that are being used for <180-days hazardous waste accumulation. The HWAA located at Annex #4 is described above, and the other three HWAAs that contained waste at the time of the inspection are described below. Mr. Burt stated that Magazine H, located west of Building 3, can be used as an HWAA but was empty at the time of the inspection and therefore not inspected.

Magazine G is a small enclosed storage container that is located between Buildings #1 and #2 and is used as an HWAA for D001/D003 hazardous waste debris (Photo 26). There were two 1-CY lined, fiberboard accumulation containers located inside the magazine (Photos 27 and 28). The containers were closed but were not properly labeled with the words "Hazardous Waste" and were not marked with an indication of the hazards of the contents [40 CFR 262.16(b)(6)(i)(A), 40 CFR 262.16(b)(6)(i)(B)]. The facility attaches a written log to the container that includes the weight and date the waste was added to the container. The waste had been accumulating for less than 180-days. The facility was not performing weekly inspections of the accumulation containers and was not maintaining documentation [40 CFR 262.16(b)(2)(iv), 62-730.160(3), FAC]. The HWAA did not have all the required equipment since there was no spill kit or eyewash available in the area [40 CFR 262.16(b)(8)(ii)(C)].

Adjacent to Annex #1 is an outdoor HWAA. Product drums and empty drums are also stored in this area. There were six hazardous waste accumulation containers located in the area (Photos 29-31). Three of the containers were 85-gallon overpack drums of waste OCBA, one of the containers was an 85-gallon overpack drum of OCBA spill clean-up waste, and two of the containers were 55-gallon drums of waste milano. All the accumulation containers were closed. The four waste OCBA containers were properly labeled with the words "Hazardous Waste" but were not marked with an indication of the hazards of the contents [40 CFR 262.16(b)(6)(i)(B)]. The two containers of waste milano were not properly labeled "Hazardous Waste" and were not marked with an indication of the hazards of the contents [40 CFR 262.16(b)(6)(i)(A), 40 CFR 262.16(b)(6)(i)(B)]. All hazardous waste accumulation containers had been accumulating for less than 180-days. The facility was not conducting weekly inspections of the HWAA and was not maintaining documentation of the inspections [40 CFR 262.16(b)(2)(iv), 62-730.160(3), FAC]. The HWAA did not have all the required equipment since there was no spill kit [40 CFR 262.16(b)(8)(ii)(C)].

Inside the Warehouse on the top of one of the shelving units is an HWAA (Photos 32 and 33). In this location, approximately 18'-20' above floor level, the accumulation containers are not available for inspection and the written inspection documentation the facility maintained was incomplete [40 CFR 262.16(b)(2)(iv), 62-730.160(3), FAC]; and there was not adequate aisle space to allow for inspection [40 CFR 262.16(b)(8)(v), 62-730.160(4), FAC]. There were five 1-CY lined, fiberboard accumulation containers located in this area. All the containers appeared to be closed. None of the containers appeared to be properly labeled with the words "Hazardous Waste" and did not appear to be marked with an indication of the hazards of the contents [40 CFR 262.16(b)(6)(i)(A), 40 CFR 262.16(b)(6)(i)(B)]. The facility attaches a written log to the container that includes the weight and date the waste was added to the container. All five of the containers appeared to have a log attached to the container, but the accumulation start date could not be determined since the containers were not accessible for inspection [40 CFR 262.16(b)(6)(i)(C)]. One of the containers was marked with the accumulation state date and had been accumulating for less than 180-days. The HWAA had all the required equipment including a fire extinguisher, spill kit and eyewash.

PACEM SOLUTIONS TRAINING FACILITY

On January 28, 2021, PACEM Defense – AMTEC Less Lethal Systems submitted a “self-disclosure” notification to the U.S. Environmental Protection Agency (EPA) via EPA’s eDisclosure website and to the Department via letter to report that it had burned nine 1-CY lined, fiberboard accumulation containers of D001/D003 hazardous waste during a two-day period in December 2020 at its “sister” facility, PACEM Solutions Training Facility. This Training Facility is located directly across a public road, Providence Road, from the PACEM Defense production facility described in this report. Whereas the parcel properties for both the Training Facility and the PACEM Defense facility are owned by the same corporation, PACEM Estate Holdings, LLC (headquartered in Falls Church, Virginia), the Training Facility is operated by PACEM Defense’s “sister” corporation, PACEM Solutions, LLC (also headquartered in Falls Church). The Training Facility is operated as a firing range that is used for training purposes by various entities within the state including law enforcement agencies. The area at the Training Facility where PACEM Defense burned the hazardous waste accumulation containers was inspected. The area is a grassed, open field that is down-range of one of the firing lines (Photo 34). Based on information provided in PACEM Defense’s self-disclosure correspondence to EPA and the Department, PACEM Defense did not ensure proper disposal of hazardous waste [40 CFR 262.20(a)].

RECORDS REVIEW

The facility is operating as a SQG of hazardous waste. Records reviewed included manifests, waste determination documentation, weekly inspection logs, personnel training documentation, and emergency arrangements. All records reviewed appeared to be in order unless otherwise described herein.

Clean Harbors Environmental Services, Inc. (MAD039322250) and Tri-State Motor Transit (MOD095038998) manage the facility's hazardous waste. The following routine wastestreams are generated by the facility:

* D001/D003 Waste Debris from Manufacturing (i.e., Flash Powder), managed under Profile #CH1778996;
* D001 Floor Sweepings Containing CS Mixture, managed under Profile #CH990512;
* D001 Used CS Mix Process Filters, managed under Profile #CH990507; and
* D003/D008 Small Arms Cartridges, managed under Profile #CH1996160.

Based on the facility's disposal records, there has been only one shipment of hazardous waste since operations began in October 2018. Tri-State Motor Transit managed 888 pounds of D001/D003 Flash Powder and 1,021 pounds of D003/D008 Waste Cartridges on 03/26/2020. The facility provided a copy of a hazardous waste manifest dated 03/29/2021 that was for 2,271 pounds of "Tear Gas Substances, Solid" waste transported by Clean Harbors Environmental Services, but there were no hazardous waste codes listed on the manifest, the profile number that was listed did not appear to match the hazardous waste profiles described above, and the facility could not provide any further information on this shipment prior to completion of this report.

Veolia ES Technical Solutions (FL0000207449) manages the facility’s universal waste and the last shipment was on 06/25/2021. Safety-Kleen Systems, Inc. (TXR000081205) manages the facility’s used oil and the last shipment was on 06/24/2021.

The facility had not conducted weekly inspections and documented the weekly inspections at the following HWAAs: Maintenance Building, Annex #4B (no waste was accumulating at the time of the inspection), outdoor area adjacent to Annex #1A, Magazine G, and inside the Warehouse [40 CFR 262.16(b)(2)(iv), 62-730.160(3), FAC].

The facility had attempted to make emergency arrangements with the Fire Department but had not made arrangements with other local authorities as required [40 CFR 262.16(b)(8)(vi)(A)]. The facility had posted emergency information in locations where hazardous waste is generated.

The facility did not have any training records to document personnel training prior to July 2021. Due to the improper disposal of hazardous waste in December 2020 that was reported to EPA and the Department, it appears that the facility did not ensure that all employees are thoroughly familiar with proper hazardous waste handling and emergency information [40 CFR 262.16(b)(9)(iii)].

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Copies of Northeast District’s Hazardous Waste Generator Workshop PowerPoint training documents and other workshop files that may be useful can be found here: ftp://ftp.dep.state.fl.us/pub/outgoing/NED%20-%20HazWaste/SQG%20WORKSHOP/

Please note that you cannot access this site using Chrome so you will have to use another browser such as Edge, Firefox, Internet Explorer, etc.

Please note that 40 CFR 262.18 requires re-notification for SQGs by September 1, 2021, and every four years thereafter.
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For Outstanding Items of Potential Non-Compliance

Please review the following section – New Potential Violations and Areas of Concern. This section includes potential violations observed at your facility during this inspection. For any potential violations below that have not been corrected, please refer to the Corrective Action for each item that is suggested to bring your facility into compliance. Once the corrective action has been completed, please send documentation to the Principal Inspector listed on page 1 of this Inspection Report. This documentation includes, but is not limited to, photos of corrected items, manifests, SDSs or other documents that will show that each potential violation has been fully addressed.

Areas of Concern:
1. Annex #4B - Inspectors observed debris in the general trash in Annex #4B that appeared to be the same type of debris that is also managed as hazardous waste in the satellite accumulation containers in that location and other locations around the facility. The facility should ensure that personnel training includes specific information for this waste profile so that a distinction between the two wastestreams is clearly understood.
2. Magazine Building #10 - Inspectors observed expired/unusable products in Building #10. The facility should ensure that a timely waste determination is made on any products that cannot be re-used.
3. Maintenance Building - Inspectors observed MEK in two products at the Maintenance Building that, depending upon use, could generate a D035 hazardous waste. The facility did not have any waste determination documentation for these waste products and did not have D035 on any of its wastestreams. The facility should ensure it makes an accurate hazardous waste determination on waste generated during use of these products.
4. Maintenance Building - Inspectors observed an area of stained concrete and soil underneath several 55-gallon drums of used oil located outside the Maintenance Building. The facility should determine if this staining is the result of a used oil release and if so, should take the following actions: (1) Stop the release; (2) Contain the released used oil; (3) Clean up and properly manage the released used oil and other materials; and (4) If necessary, repair or replace any leaking used oil storage containers prior to returning them to service.

New Potential Violations and Areas of Concern:

Violations

Type:	Violation 1
Rule:	262.11
Explanation:	The facility failed to make a complete and accurate waste determination for the following wastestreams: 1. Annex #1A - wastewater collected in the underground vault adjacent to this annex that is generated from mopping floors in other annexes and buildings throughout the facility; 2. Annex #1B - unknown contents of one 55-gallon drum that was approximately 1/3-full; 3. Building #1 - waste generated from the use of OPEX Red Lacquer; and 4. Maintenance Building - scrap metal being thrown in the general trash.
Corrective Action:	In order to return to compliance, the facility should perform and fully document a hazardous waste determination on each of the listed wastestreams prior to disposal as follows: 1. The waste determination should be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs; determine whether the waste meets any of the listing descriptions or hazardous characteristics under 40 CFR part 261; use information on the chemical and physical properties of the chemicals used or produced by the processes; and conduct testing that illustrates the properties of the waste; 2. Determine the prior use for this drum and analyze the contents, at a minimum, for Ignitability, pursuant to 40 CFR 261.21, via method 1010; 3. Obtain a Manufacturer's statement regarding the leachability of MEK in the paint, or have a representative sample of the wastestream analyzed for Toxicity Characteristic Leaching Procedure (TCLP) for MEK, pursuant to 40 CFR 261.24, via method 8260; and 4. Either recycle the scrap metal from this building or have a representative sample of the wastestream analyzed for TCLP RCRA metals, pursuant to 40 CFR 261.24, via method 6010. Waste determinations that include lab analysis should be made by having a representative sample of the wastestream analyzed separately by a Florida certified laboratory. A copy of the results of these waste determinations should be submitted to the Department. None of these wastes are to be disposed of until written approval has been given by the Department and once written approval has been given, the waste should be disposed of in a proper manner. Hazardous waste should be sent off-site to a permitted Treatment, Storage, and Disposal Facility (TSDF). Non-hazardous solid waste should be collected and sent off-site to a permitted solid waste facility, and non-hazardous liquid waste should be collected and sent off-site to a permitted treatment facility that is authorized to treat that type of waste.

	NOTE: None of the samples are to be composites. The samples are to be collected and analyzed in accordance with EPA publication SW# 846 “Test Methods for Evaluating Solid Waste” 3rd Edition. All sampling and analysis shall be conducted in accordance with Rule 62-160, FAC. A National Environmental Laboratory Accreditation Program (NELAP) certified laboratory should analyze the samples. Alternative methods for hazardous waste determinations should be approved by the Department.

Type:	Violation 2
Rule:	262.15(a)(4)
Explanation:	The facility failed to keep the following hazardous waste satellite containers closed: 1. Annex #1A - one 5-gallon container of hazardous waste solid debris; 2. Annex #3 - one 5-gallon container of hazardous waste solid debris; and 3. Building #2 - one approximately 15-gallon plastic bag of hazardous waste solid debris.
Corrective Action:	In order to return to compliance, the facility should close all its hazardous waste satellite containers unless adding or removing waste.

Type:	Violation 3
Rule:	262.15(a)(5)
Explanation:	The facility failed to properly label the following hazardous waste satellite containers: 1. Annex #1A - two 5-gallon containers were not marked with an indication of the hazards of the contents; 2. Annex #1B - one 55-gallon drum was not marked with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; 3. Annex #3 - three 5-gallon containers were not marked with an indication of the hazards of the contents; and one 55-gallon drum was not marked with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; 4. Annex #4A - one 5-gallon container was not marked with an indication of the hazards of the contents; and one 55-gallon drum was not marked with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; 5. Annex #4B - one 5-gallon container was not marked with an indication of the hazards of the contents; 6. Magazine Building #10 - three 5-gallon containers were not marked with an indication of the hazards of the contents; 7. Building #2 - three 5-gallon containers were not marked with an indication of the hazards of the contents, but only one container contained waste; and one approximately 15-gallon plastic bag was not marked with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; and 8. Building #3 - five 5-gallon containers were not marked with an indication of the hazards of the contents.
Corrective Action:	In order to return to compliance, the facility should label all its hazardous waste satellite containers with the words "Hazardous Waste" and with an indication of the hazards of the contents.

Type:	Violation 4
Rule:	262.15(a)(7)
Explanation:	The facility failed to ensure that two 5-gallon hazardous waste satellite containers located in the back room in Building #3 had all the required equipment including a fire extinguisher and eyewash.
Corrective Action:	In order to return to compliance, the facility should install a fire extinguisher and an eyewash in that room.

Type:	Violation 5
Rule:	262.16(b)(2)(iv) , 62-730.160(3)

Explanation:	The facility failed to conduct and fully document weekly inspections of its hazardous waste accumulation containers located in the following HWAAs: 1. Maintenance Building - one 55-gallon accumulation drum of hazardous waste; 2. Magazine G - two 1-CY fiberboard accumulation containers of hazardous waste; 3. Adjacent to Annex #1A - four 85-gallon accumulation drums of hazardous waste and two 55-gallon accumulation drums of hazardous waste; and 4. Warehouse - five 1-CY fiberboard accumulation containers of hazardous waste.
Corrective Action:	No further action is required. The facility returned to compliance via an email dated July 23, 2021.

Type:	Violation 6
Rule:	262.16(b)(6)(i)(A) , 262.16(b)(6)(i)(B)
Explanation:	The facility failed to properly label the following hazardous waste accumulation containers: 1. Maintenance Building - one 55-gallon accumulation drum of hazardous waste was not marked with an indication of the hazards of the contents; 2. Magazine G - two 1-CY fiberboard accumulation containers of hazardous waste were not labeled with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; 3. Adjacent to Annex #1A - four 85-gallon accumulation containers of hazardous waste were not marked with an indication of the hazards of the contents; 4. Adjacent to Annex #1A - two 55-gallon accumulation containers of hazardous waste were not labeled with the words "Hazardous Waste" or marked with an indication of the hazards of the contents; and 5. Warehouse - five 1-CY fiberboard accumulation containers of hazardous waste were not labeled with the words "Hazardous Waste" or marked with an indication of the hazards of the contents.
Corrective Action:	In order to return to compliance, the facility should label all its hazardous waste accumulation containers with the words "Hazardous Waste" and with an indication of the hazards of the contents.

Type:	Violation 7
Rule:	262.16(b)(6)(i)(C)
Explanation:	The facility failed to label four 1-CY fiberboard hazardous waste accumulation containers located in the Warehouse HWAA with the accumulation start date.
Corrective Action:	In order to return to compliance, the facility should label all its hazardous waste accumulation containers with the date when hazardous waste is first added to the accumulation container.

Type:	Violation 8
Rule:	262.16(b)(8)(ii)(C)
Explanation:	The facility failed to provide the required equipment described below in the following HWAAs: 1. Magazine G - did not have a spill kit or access to an eyewash; and 2. Adjacent to Annex #1A - did not have a spill kit.
Corrective Action:	In order to return to compliance, the facility should place spill kits in both HWAAs and an eyewash in one HWAA.

Type:	Violation 9
Rule:	262.16(b)(8)(v) , 62-730.160(4), FAC
Explanation:	The facility failed to maintain adequate aisle space between hazardous waste accumulation containers located in the Warehouse HWAA to allow for inspection of the condition and labels of the individual containers, and to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and

	decontamination equipment in an emergency.
Corrective Action:	In order to return to compliance, the facility should ensure that all hazardous waste accumulation containers have adequate aisle space to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in an emergency, as well as to allow for inspection of the containers.

Type:	Violation 10
Rule:	262.16(b)(8)(vi)(A)
Explanation:	The facility failed to make arrangements with the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility.
Corrective Action:	In order to return to compliance, the facility should attempt to make arrangements with the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. The facility provided documentation in an email dated July 23, 2021, that it had attempted to make arrangements with the fire department as required. The emergency arrangements coordination for other organizations described herein is to familiarize them with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility. The facility should maintain records documenting the arrangements for a period of three years. This documentation should either confirm such arrangements actively exist or, in cases where no arrangements exist, confirm that attempts to make such arrangements were made. The facility should submit documentation to the Department that emergency arrangements have been made with these organizations and that the required information described above has been provided to these organizations.

Type:	Violation 11
Rule:	262.16(b)(9)(iii)
Explanation:	The facility failed to ensure that all its employees were thoroughly familiar with hazardous waste management procedures and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
Corrective Action:	No further action is required. The facility submitted documentation of its personnel training in an email dated July 23, 2021. The facility is reminded that it should also train its new employees, within six months of hiring, on proper waste handling procedures relevant to their work responsibilities and on the facility's emergency procedures as discussed in the emergency arrangements submitted to local authorities. All employees should receive 'refresher' training if any changes are made to the facility's waste handling procedures and/or its emergency procedures.

Type:	Violation 12
Rule:	262.20(a)
Explanation:	The facility failed to properly manifest and dispose of nine 1-CY fiberboard hazardous waste accumulation containers of D001/D003 hazardous waste solids and burned the waste on December 29 and 30, 2020, at the PACEM Solutions Training Facility located across the road from the PACEM Defense manufacturing facility. Both PACEM properties are owned by PACEM Estate Holdings, LLC.
Corrective Action:	In order to return to compliance, the facility should dispose of all hazardous waste at an approved hazardous waste Treatment, Storage, and Disposal Facility (TSDF), use a properly completed hazardous waste manifest for all shipments of hazardous waste from

	the facility, and maintain all disposal records at the facility for three years. Additionally, the facility should ensure that all personnel responsible for waste management are trained in waste management procedures in accordance with 40 CFR 262.16(b)(9)(iii).

Type:	Violation 13
Rule:	273.14(e) , 62-737.400(5)(b), FAC
Explanation:	The facility failed to properly label three boxes of universal waste lamps located in the Maintenance Shed with the words: "Universal Waste Lamps," or "Waste Lamps," or "Used Lamps."
Corrective Action:	No further action is required. The facility disposed of its universal waste lamps on June 25, 2021, and provided a copy of the shipping documents in an email dated July 23, 2021.

Type:	Violation 14
Rule:	273.15(a)
Explanation:	The facility failed to properly manage one full box of universal waste lamps, dated 2/25/2020, within one year of accumulation and failed to indicate the start date of accumulation on three other full boxes of universal lamps that were all located in the Maintenance Shed. The facility did not have an inventory to demonstrate that the universal waste lamps had been accumulating for less than one year.
Corrective Action:	No further action is required. The facility disposed of its universal waste lamps on June 25, 2021, and provided a copy of the shipping documents in an email dated July 23, 2021.

Type:	Violation 15
Rule:	62-710.401(6), FAC
Explanation:	The facility failed to provide secondary containment for five 55-gallon drums of used oil that were located outside the Maintenance Building.
Corrective Action:	No further action is required. The facility returned to compliance by properly disposing of its used oil on June 24, 2021, and provided a copy of the manifest in an email dated July 23, 2021. The facility is reminded that it should only store used oil in containers that are either double-walled or stored on an oil-impermeable surface with engineered secondary containment that has the capacity to hold 110% of the volume of the largest container within the containment area. Containers with a capacity of 55 gallons or less that are stored on an oil-impermeable surface inside a structure will meet the secondary containment requirement. Containers or tanks with a total capacity greater than 55 gallons must be double-walled, or they must be stored on an oil-impermeable surface such as sealed concrete or asphalt and be within secondary containment. All used oil containers and tanks stored outside of a structure, regardless of size, must be closed or covered or otherwise protected from the weather.

Type:	Violation 16
Rule:	62-710.850(1), FAC
Explanation:	The facility failed to properly manage its used oil filters and disposed of its drained oil filters in the regular trash.
Corrective Action:	In order to return to compliance, the facility should immediately stop disposing of used oil filters in the trash. Used oil filters should be stored in a container that is in good condition (not leaking), sealed or otherwise protected from the environment, stored on an oil-impermeable surface, and labeled "Used Oil Filters." Used oil filters should be disposed of through a Florida-registered Used Oil Filter Transporter.

PACEM Defense - AMTEC Less Lethal Systems Inspection Report

Inspection Date: 06/16/2021

PHOTO ATTACHMENTS:

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

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Photo 7

Photo 8

Photo 9

Photo 10

Photo 11

Photo 12

PACEM Defense - AMTEC Less Lethal Systems Inspection Report

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Photo 13

Photo 14

Photo 15

Photo 16

Photo 17

Photo 18

PACEM Defense - AMTEC Less Lethal Systems Inspection Report

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Photo 19

Photo 20

Photo 21

Photo 22

Photo 23

Photo 24

PACEM Defense - AMTEC Less Lethal Systems Inspection Report

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Photo 25

Photo 26

Photo 27

Photo 28

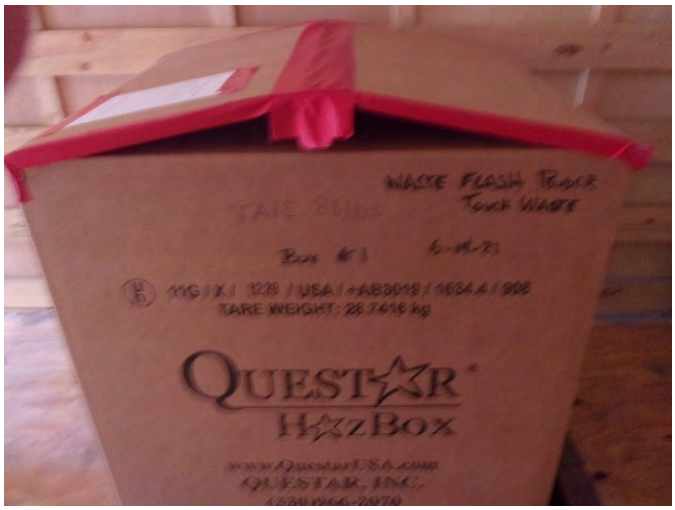

Photo 29

Photo 30

Inspection Date: 06/16/2021

Photo 31

Photo 32

Photo 33

Photo 34

1.0: Pre-Inspection Checklist

Requirements:

The requirements listed in this section provide an opportunity for the Department's inspector to indicate the conditions found at the time of the inspection. A "Not Ok" response to a requirement indicates either a potential violation of the corresponding rule or an area of concern that requires more attention. Both potential violations and areas of concern are discussed further at the end of this inspection report.

Note: Checklist items with shaded boxes are for informational purposes only.

Item No.	Pre-Inspection Review	Yes	No	N/A
1.1	Has the facility notified with correct status? 262.18(a)			✓
1.2	Has the facility notified of change of status? 62-730.150(2)(b)			✓
1.3	Did the facility conduct a waste determination on all wastes generated? 262.11			✓

Signed:

A hazardous waste compliance inspection was conducted on this date, to determine your facility's compliance with applicable portions of Chapters 403 & 376, F.S., and Chapters 62-710, 62-730, 62-737 & 62 -740 Florida Administrative Code (F.A.C.). Portions of the United States Environmental Protection Agency's Title 40 Code of Federal Regulations (C.F.R.) 260 - 279 have been adopted by reference in the state rules under Chapters 62-730 and 62-710, F.A.C

Cheryl L Mitchell	Inspector	
Principal Investigator Name	**Principal Investigator Title**	
	DEP	09/14/2021
Principal Investigator Signature	**Organization**	**Date**

James Burt	HSE and Facilities Director
Representative Name	**Representative Title**
	PACEM Defense
	Organization

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Potential Violations" or areas of concern.

Report Approvers:

Approver:	Cheryl L Mitchell	**Inspection Approval Date:**	09/14/2021