

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Honeywell by Salisbury
4295 Atlanta St.
North Charleston, South Carolina 29418
Charleston County
EPA ID Number: SCD000825729
Latitude: 32.513706
Longitude: -80.005546
NAICS: 326299 – All Other Rubber Product Manufacturing
SIC Code: 3069 – All Other Rubber Product Manufacturing (Fabricated Rubber Products)

3) Responsible Officials

Jonathan Bittner (Cade)
Senior Health Safety & Environment (HSE) Manager
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4) Inspection Participants

Cade Bittner, Senior HSE Manager, Honeywell by Salisbury
Matthew Holmes, HSE Manager, Honeywell by Salisbury
Brian Tulay, Senior Manufacturing Engineer, Honeywell by Salisbury
David Mosgrove, Plant Manager, Honeywell by Salisbury
Gerald D. Shealy, South Carolina Department of Health and Environmental Control (SCDHEC)
Sean P. Hannigan, SCDHEC
Parvez Mallick, USEPA
Mark Anthony Relon, USEPA

5) **Date of Inspection**

June 28, 2022, 9:30 a.m.

6) **Applicable Regulations**

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), South Carolina Hazardous Waste Management Regulations (SCHWMA) R.61-79, 260 through 270, 273, 278, & 279; and 40 Code of Federal Regulation (C.F.R.), Parts 260 - 270, 273, 278, & 279.

Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with S.C. Code Ann. Regs. 61-79.262.16(b) or R.61-79.262.17(a) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in S.C. Code Ann. Regs. 61-79.262.15(a)(7) and (8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to S.C. Code Ann. Regs. 61-79.262.17 [40 C.F.R. § 262.17], a large quantity generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in S.C. Code Ann. Regs. 61-79.262.17 [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to S.C. Code Ann. Regs. 61-79.273.9 [40 C.F.R. § 273.9], a Small Quantity Handler of Universal Waste (SQHUW) is a universal waste handler who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

7) **Purpose of Inspection**

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Honeywell by Salisbury’s compliance with the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) **Previous Inspection History**

SCDHEC has conducted one RCRA compliance evaluation inspection (CEI) at the subject facility since calendar year 2015. The most recent RCRA CEI was conducted on April 13, 2015, and SCDHEC found no violations of RCRA requirements during that inspection.

9) **Facility Description**

Honeywell by Salisbury is a manufacturer of personal protective equipment (PPE) and live line tools to protect electrical workers from the hazards of their job. Salisbury's arc flash and shock protection PPE kits meet the safety standards categorized by the PPE Category for each job. Salisbury electrical safety products are tested and comply with ASTM (American Society for Testing and Materials) standards and regulations. Salisbury can provide the complete list of PPEs required to protect workers against electrical hazards as defined by OSHA Regulations and the NFPA 70E Standard for electrical safety in the workplace. The Honeywell by Salisbury sleeves facility (hereinafter HBS or the facility) is a manufacturer of rubber sleeves for electric line men (Photo #1). The industrial electrical linemen sleeves are made on porcelain sleeve forms dipped into a liquid rubber cement. The sleeves provide line men with extended coverage of the arm, from the cuff of rubber insulating glove to the shoulder. This enhances protection to these areas from accidental contact with energized conductors and equipment.

Salisbury dipped sleeves are now available with radio frequency identification chip technology and are offered in the same colors as dipped gloves, including two color combinations. HBS offers two popular styles of dipped linemen's sleeves: straight and extra-curved. Both styles are available in solid color or dual color combination, various sizes and voltage classes.

The sleeves facility is located at 4295 Atlanta Street, North Charleston, Charleston County, South Carolina. The property is bordered by the Seaboard Railway Line and industrial properties to the south, Interstate 526 and industrial properties to the west, Pacific Street and industrial properties to the north, and Atlanta Street and industrial properties to the east. The site comprises approximately 5 acres, of which approximately 3.75 acres are occupied by structures and other impervious surfaces. The plant operates twenty-four hours per day, seven days per week, and fifty weeks per year. The number of employees at this operation is approximately thirty-five.

Processes associated with the operations at Salisbury include material handling, material storage, and waste handling/storage. The production of sleeves includes the use of various compounded natural rubbers, mixing with solvents, dipping, curing, then wet stripping with soap and water solution to prevent sticking. The sleeves are then chlorinated, dried, and inspected. Sleeves that are rejected are disposed of along with the rubber scrap in a local landfill. Volatile organic compound (VOC) emissions from the processes are controlled by the carbon absorption unit, an integral part of the solvent recovery unit (SRU).

A tank farm for virgin solvent and fuel oil storage is located on the southwest portion of the Site. In addition, Salisbury stores process chemicals at various locations in 55-gallon drums, 20-gallon drums, and 5-gallon buckets. The chemicals are typically stored on spill pallets within buildings.

This facility has been operating as a large quantity generator (LQG) of hazardous waste for over thirty years, and first notified at this location in 1991. The facility most recently notified as an LQG of hazardous waste on January 28, 2022 when Mr. Bittner changed site contact address and phone number. The facility has identified the following hazardous waste streams in their most recent notification - EPA waste D-codes: D001, D002, D005-D009, D035, D039, and D040; F-codes: F002 and F003; U codes: U112 and U239.

Hazardous wastes are generated principally in the Mixing, Dipping, and Laboratory Departments. A rubber cement is formed by mixing natural rubber with solvents and tumbling the components for period until a desired viscosity is achieved. The rubber cement used during the dipping process is regularly emptied due to contamination by foreign matter, water, or other irregular physical/chemical properties. Solvent located in the dipping units is drained or scraped away (in the case of sludge or collected solids) and stored in 55-gallon drums, characterized, categorized, and properly dated and labeled prior to being placed in each facility's less than 90-Day Storage Building. The waste is disposed of in both solid and liquid form. The hazardous waste code D001 (ignitable) designate this material. Additionally, isobutyl methyl ketone is used as part of the rubber cement mixture. This would normally require waste code F003 (listed non-halogenated solvents), but the solvent is not being used for its solvent properties.

On occasion corrosive waste can be generated due to the use of acids (hydrochloric acid, sulfuric acid, sodium hydroxide, and sodium hypochlorite) to operate the chlorinator and wastewater treatment system. The waste is accumulated and drained into poly 55-gallon drums or totes, categorized as corrosive waste, dated, and labeled prior to being placed in the facility's less than 90-Day Storage Building. The hazardous waste code D002 (corrosive) designates this material. The sodium hypochlorite may also include hazardous waste code D007 (chromium).

HBS may also generate hazardous from the use of paints and aerosol cans during maintenance activities. Hazardous waste codes D001 (ignitable), D005 (barium), D006 (cadmium), D007 (chromium), D008 (lead), D035 (methyl ethyl ketone), D039 (tetrachloroethylene), D040 (trichloroethylene), and F005 (listed non-halogenated Solvents) designate this material.

The waste is typically shipped off-site quarterly. The facility stated that no full hazardous waste container is stored for more than 90-days. The facility maintains three satellite accumulation areas, which are located in the Maintenance Area, Mix Room, and CR 14.

10) Opening Conference

On June 28, 2022, the EPA inspectors Parvez Mallick and Mark Anthony Relon, accompanied by SCDHEC inspectors Gerald D. Shealy and Sean P. Hannigan, arrived at Honeywell by Salisbury approximately 9:00 a.m. Mr. Cade Bittner, Senior HSE Manager, Honeywell by Salisbury, immediately received the inspectors. Mr. Cade Bittner, Senior HSE Manager, Honeywell by Salisbury and the inspectors were joined by Mr. Matthew Holmes, HSE Manager, Honeywell by Salisbury, Brian Tulay, Senior Manufacturing Engineer, Honeywell by Salisbury David Mosgrove, Plant Manager, Honeywell by Salisbury, for the opening conference. The inspectors introduced themselves, showed their credentials, and explained the purpose of the visit. The inspectors described the anticipated use of equipment (digital camera) during the inspection and provided a request for records. The inspectors were informed that due to potentially hazardous area and explosive atmospheres in the process area, an intrinsically safe camera is required to photograph throughout the facility. Mr. Bittner volunteered to take inspection photos with an intrinsically safe camera during the inspection.

The inspectors discussed the company's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to the EPA. The company did not assert a business confidentiality claim. The inspection participants also discussed health and safety

protocols and required personal protective equipment before Mr. Bittner led the inspectors on a tour of the Facility operations.

Mr. Bittner provided an overview of the facility's history and current operations during the opening conference. The company does not appear to meet the Small Business Regulatory Enforcement Fairness Act's classification of a "small business," which is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. Therefore, the EPA inspector did not provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

11) **Findings**

Central Accumulation Area (90-day hazardous waste storage area)

The less than 90-day hazardous waste storage area is located inside of the rubber storage room adjacent to the mix room in a designated fenced area (Photo #2), and is equipped with movable containments to prevent spills from discharging from the building. The 90-day area at the facility is equipped with a sloped concrete floor and curbing to prevent spills from discharging from the environment and a canopy to reduce rainfall accumulation. The inspectors observed the following waste containers in the 90-day hazardous waste storage area:

- Two 5-gallon containers of non-PCB capacitors marked "Non-hazardous Waste" (Photos #2-3);
- One 5-gallon container marked "Universal Waste – Batteries" dated 1/16/22 (Photo #4);
- One rectangular cardboard box containing 4' long "Universal Waste – Lamps" dated 1/16/22 (Photo #2 and 5);
- One 55-gallon blue container of non-hazardous PPE and boom absorbents (Photo #6).

Behind the 90-day hazardous waste storage area, the inspectors observed one 80-gallon parts washer. The facility indicated that Safety Kleen premium gold solvent is used for cleaning and degreasing metal parts. The safety data sheet indicated that the flash point was 148°F. The inspectors also observed a 55-gallon satellite container of solvent contaminated rags and wipes (Photos #7-8). The container was closed, marked "Hazardous Waste," and with a flammable solid DOT hazard placard but was not marked with an indication that the contents are toxic.

Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with an indication of the hazards of the contents.

Mix Room

Employees mix batch loads of rubber cement with solvents [varnish maker and painters (VM&P), naphthol spirit, and MEK] to prepare a viscous liquid in a tank. Generally, it takes about two days to prepare a right mix/viscosity of liquified rubber. The liquified rubber runs through sock filters to eliminate any solids. The employees are required to wear a full face mask due to high concentration volatile organic compounds (VOCs) in the Mix Room. The inspectors observed one closed 55-gallon satellite container of waste samples. The container was closed, marked with "Hazardous Waste" and flammable gas DOT hazard placard.

The VOC emissions from the processes are controlled by the carbon absorption unit, an integral part of the solvent recovery unit (SRU). Recovered solvents from the SRU unit are stored into one of the two solvent tanks and the water is discharged into an outfall outside of the finishing room. Mr. Bittner indicated that recovered water from the SRU is not treated prior to discharging to the facility outfall.

CR-14 (Boiler Room)

The inspectors observed the following containers in the CR-14 room:

- One closed 55-gallon container containing aerosol cans. The container was marked “Hazardous Waste” and flammable gas DOT hazard placard;
- One 80-gallon parts washer with Safety Kleen premium gold solvent; and
- Two 55-gallon containers marked “Used Oil.”

Finishing Room

The dried sleeves are inspected in this area for protection, insulation, and arc flash resistance. The sleeves are hand inspected before packing. Sleeves that are rejected are disposed of along with the rubber scrap to a subtitle D landfill. No hazardous wastes were observed in this area.

Records Review

After the walkthrough, the inspectors requested and reviewed the last three years of hazardous waste manifests, quarterly reports, land disposal restriction forms, waste minimization reports, hazardous and nonhazardous waste profiles, hazardous waste employee training documentation, RCRA training course information, weekly hazardous waste storage inspections, the contingency plan, position descriptions, used oil and the universal waste manifests.

HBS’s Emergency Response Plan/Contingency Plan (ERP/CP) and quick reference guide (QRG) were not available for review during the inspection. Mr. Bittner stated that Clover, South Carolina’s (a sister facility where gloves are manufactured) ERP/CP are used for the sleeve facility located North Charleston, South Carolina. The Clover facility ERP/CP was last updated on June 17, 2021. The inspector indicated that each facility must have their own CP and QRG and must be kept at the facility in case of an emergency. In addition, the CP must describe arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospital or the Local Emergency planning committee.

On August 23, 2022, Mr. Bittner provided CP and QRG for the HBS facility. The revised CP and QRG were dated August 2022. On August 19, 2022, the facility sent revised CP and QRG to the North Charleston Police, North Charleston Fire, Charleston County Emergency Management, South Carolina Department of Public Safety, Roger St. Francis Hospital, ES Integrated, and SCDHEC.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates S.C. Code Ann. Regs. 61-79.262.262(a) [40 C.F.R. § 262.262(a)], and is a condition of the LQG Permit Exemption, a copy of the contingency plan and all revisions to the plan must be maintained at the large quantity generator and (a) the large quantity generator must submit a copy of the contingency plan and all revisions to all local emergency responders (*i.e.*, police departments, fire departments, hospitals and State and local emergency response teams that may be

called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates S.C. Code Ann. Regs. 61-79.262.262(b) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a LQG generator that is amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders or, as appropriate, the Local Emergency Planning Committee.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates S.C. Code Ann. Regs. 61-79.262.261(c) [40 C.F.R. § 262.261(c)], and is a condition of the LQG Permit Exemption, the contingency plan must describe arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals, or, if applicable, the Local Emergency Planning Committee.

The inspectors reviewed training records for other employees who manage hazardous wastes at the facility. The following employees did not receive hazardous waste training: Ernest Johnson (2020-2021); Matthew Mustach (2021); Wyatt Trumble (2021); Cleve Johnson (2019-2021); Tony Black (2019 and 2021) and Kathy Tackett (2021).

On June 29, 2022, Mr. Bittner provided a training roster for fire suppression system, bonding, and grounding to EPA and SCDHEC. This training is inadequate for facility personnel handling hazardous waste. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable: (1) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; (2) Key parameters for automatic waste feed cut-off systems; (3) communications or alarm systems; (4) Response to fires or explosions; (5) Response to ground-water contamination incidents; and (6) Shutdown of operations. In addition, the training program must be directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(7)(i)(A) and (iii) [40 C.F.R. § 262.17(a)(7)(i)(A) and (iii)], which is a condition of the LQG Permit Exemption, the LQG personnel must successfully complete a program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part; and must take part in an annual review of the initial program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(7)(i)(A) and (iii) [40 C.F.R. § 262.17(a)(7)(i)(B)-(C)], which is a condition of the LQG Permit Exemption, the LQG the LQG training program must be directed by a person trained in hazardous waste

management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed; (C) the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable: (1) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; (2) Key parameters for automatic waste feed cut-off systems; (3) Communications or alarm systems; (4) Response to fires or explosions; (5) Response to ground-water contamination incidents; and (6) Shutdown of operations.

12) **Closing Conference**

The inspectors conducted the exit meeting with Mr. Bittner. HBS was inspected as a large quantity generator of hazardous waste. During the closing conference, the inspectors stated their preliminary conclusions of the inspection and the inspectors requested that HBS submit information regarding actions taken subsequent to the inspection to SCDHEC and the EPA.

13) **Signed**

PARVEZ MALLICK Digitally signed by PARVEZ MALLICK
Date: 2022.09.01 15:25:14 -04'00'

Parvez Mallick
Senior Enforcement and Compliance Specialist

Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI
CHAVEZ
Date: 2022.09.01 16:05:58 -04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

CEI photos were taken by Honeywell by Salisbury, North Charleston, SC Representative



Photos #1 – Rubber sleeves for electric line men.



Photo #2 – 90-day Central accumulation area.



Photo #3 – Non-PCB waste in 90-day area.

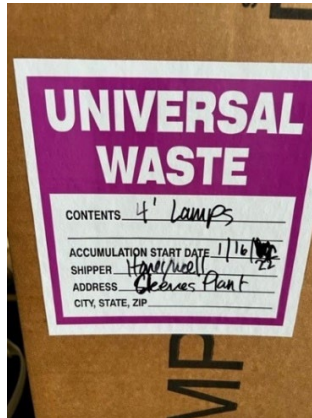


Photo #4 – 4' long lamps stored in 90-day area.

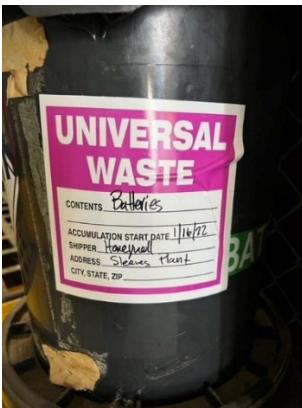


Photo #5 – 5-gallon universal lamps in the 90-day area.

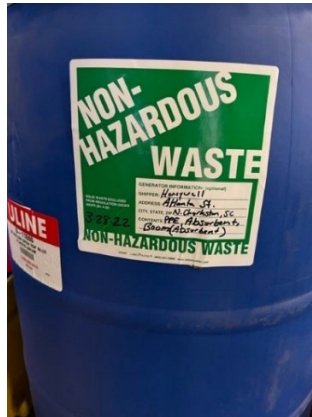


Photo #6 – A 55-gallon container of PPE and absorbent boom.

CEI photos were taken by Honeywell by Salisbury, North Charleston, SC Representative



Photo #7 - A 55-gallon container of solvent contaminated rags and wipes.



Photo #8 – A close-up view of Photo #7.