RCRA Inspection Report

1) Inspector and Author of Report

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Resource Conservation and Restoration Division
U.S. Environmental Protection Agency, Region 4
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2) Facility Information

Owner/Operator: Giant Resource Recovery - Sumter, Inc. (GRR), and
Operator: Nova Molecular Sumter, LLC (Nova)
755 Industrial Road
Sumter, South Carolina 29150-6705

Mailing Address and EPA ID#

Giant Resource Recovery - Sumter, Inc.
P.O. Box 1755
Sumter, South Carolina 29151
EPA ID# SCD036275626

Nova Molecular Sumter, LLC
208 South Magnolia Street
Sumter, South Carolina 29150
EPA ID# SCR000778381

3) Responsible Officials

Mr. Timothy Boyd, Plant Manager
Giant Resource Recovery–Sumter, Inc.

Mr. Raheem Lloyd, Environmental Engineer
Nova Molecular Sumter, LLC

4) Inspection Participants

May 4-5, 2021

Steve Bargeron, GRR
Timothy Boyd, GRR
Raheem Lloyd, Nova
Brandon Ardis, Nova
Lane Smith, Giant Cement
Laurie Benton DiGaetano, EPA
Tom Richmond, SCDHEC
Earle Watson, SCDHEC

June 24, 2021

Janice Timpson, GRR
Timothy Boyd, GRR
Laurie Benton DiGaetano, EPA
Parvez Mallick, EPA
David Champagne, EPA
Tom Richmond, SCDHEC
Earle Watson, SCDHEC
Jeff Herbig, SCDHEC
Barbara Dankmyer, SCDHEC

5) Date of Inspection

May 4-5, 2021 and June 24, 2021

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 (SCHWMR) R.61-79, 260 through 270, 273, 278, & 279; 40 Code of Federal Regulation (C.F.R.), Parts 260-270, 273, 278, & 279; and the Hazardous Waste Permit Number SCD036275626 ("HW Permit").

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection (CEI) to determine Giant Resource Recovery-Sumter, Inc.'s (GRR's) and Nova Molecular Sumter, LLC's (Nova's) compliance with the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) Previous Inspection History

The Giant Resource Recovery Sumter, Inc., and Nova Molecular Sumter, LLC, permitted hazardous waste treatment, storage, and disposal facility typically receives a RCRA CEI every year. The most recent CEI was conducted by SCDHEC on 04/19/2017. Apparent RCRA deficiencies observed during that inspection were addressed , as well as the apparent deficiencies observed during the previous joint SCDHEC and EPA RCRA CEI conducted on 12/02/2015. GRR and Nova entered into a Consent Agreement and Final Order with EPA on 01/20/2021 to resolve the apparent deficiencies noted during both CEIs.

9) Facility Description

GRR and Nova operate a commercial hazardous waste management facility at the subject 18.23-acre site in Sumter, South Carolina. GRR has approximately 80 employees on-site, and GRR operations run approximately 20 hours per day, Monday through Friday. Nova has approximately 25 employees on-site, and Nova operations run 24 hours per day, every day of the year. The companies are currently operating under the HW Permit Number SCD036275626, which was most recently modified on 03/31/2021. The Permit was issued to Giant Resource Recovery–Sumter, Inc. as the owner/operator and Nova Molecular Sumter, LLC was added as an operator in a permit modification that became effective on 09/01/2014. In addition, Nova was issued the EPA Hazardous Waste Number SCR000778381 as a large quantity generator of hazardous waste at this location on or about 08/26/2014. GRR and Nova generate, store, and treat hazardous waste at the subject facility.

The recognized industrial waste services and capabilities available at this location include: fuel blending of hazardous and non-hazardous wastes; solvent recovery; non-hazardous solid waste processing for landfill disposal and waste-to-energy; non-hazardous water processing by treatment and discharge to a POTW or stabilizing and landfill disposal; hazardous waste collection and bulking; industrial oil collection and processing for fuels blending or resale; laboratory services, which includes certified TCLP analysis; sale of reclaimed solvents including special blends for various industries; processing of high temperature wastes and wastes requiring special handling; and collection and processing of solid wastes to be sent to incinerators for

burning. In order to perform these services, the facility conducts the following operations here: container unloading and storage, container processing, bulk tanker unloading and loading, solid fuel loading, tank storage, tank treatment, and distillation.

Hazardous and non-hazardous wastes in the form of liquids, sludges, and solids arrive at the subject facility in bulk shipments, containers and drums, cubic-yard boxes, roll-off containers, tote tanks, and supersacks. Incoming hazardous waste containers may be processed for volume reduction and/or compaction, fuel blending or reclamation. The contents of hazardous waste storage tanks and bulk liquids received in tanker trucks may be processed on-site by either fuel blending or reclamation. Waste solvents and other materials that are suitable for recycling are introduced into a distillation unit for recovery and reshipment. Solvent recovery is done either through reclamation and processing for resale as a wash solvent blend or through reclamation for sale as a reclaimed product. Wastes generated from the on-site recycling process and some other materials received at the facility that cannot be recycled are blended into a fuel and shipped to a permitted facility for energy recovery. Hazardous waste materials that can be neither recycled nor used as fuel are shipped off-site to alternative hazardous waste treatment storage and disposal facilities. Site-generated hazardous wastes may remain on the facility's property in various specifically identified areas for up to ninety (90) days before shipment. Wastes that are sent off-site after being received, processed, or generated here are shipped using a new hazardous waste manifest that lists GRR or Nova as the generator.

Giant Resource Recovery, Inc. first notified SCDHEC of its hazardous waste management activities under the EPA ID# SCD036275626 on 11/11/2005. Prior to that, the subject facility was owned and operated by Southeastern Chemical and Solvents. GRR's most recent hazardous waste management notification was submitted to SCDHEC on 11/20/2020. That notification indicates that GRR is operating under the NAICS Codes 562211 for Hazardous Waste Treatment and Disposal. According to the notification, GRR is a large quantity generator, a treatment storage or disposal facility, and a transporter of hazardous waste as well as a large quantity handler of universal waste at this location.

On 06/12/2020, Nova Molecular Sumter, LLC submitted a hazardous waste management notification to SCDHEC under the EPA ID# SCR000778381. This notification indicates that Nova is operating as a large quantity generator of hazardous waste under the NAICS Code 325199 for other basic organic chemical manufacturing at this location. According to this notification, Nova generates the following hazardous waste codes here under the EPA ID# SCR000778381:

D001 ignitable
D002 corrosive
D007 containing chromium
D009 containing mercury
D011 containing silver
D035 containing MEK
F001 certain spent halogenated solvents used in degreasing
F002 certain spent halogenated solvents
F003 certain spent non-halogenated solvents
F005 certain spent non-halogenated solvents
U002 acetone
U003 acetonitrile
U031 n-butyl alcohol
U056 cyclohexane
U080 methylene chloride
U112 ethyl acetate

U122 formaldehyde
U140 isobutyl alcohol
U154 methanol
U159 methyl ethyl ketone
U161 methyl isobutyl ketone
U165 naphthalene
U196 pyridine
U213 tetrahydrofuran
U220 toluene
U239 xylene

Module III of the HW Permit ("Containers") includes two container storage areas: Storage Area 5 (SA-5) in the Lower Drum building, and Storage Area 6 (SA-6) in the Upper Drum building. The permitted storage capacity of SA-5 cannot exceed 71,170 gallons, which is the equivalent of 1,294 55-gallon drums, and SA-6 cannot exceed 31,900 gallons, which is the equivalent of 580 55-gallon drums. However, the HW Permit also limits the combined permitted storage capacity of SA-5 and SA-6. When added together, the combined permitted storage capacity of these areas may not exceed 86,790 gallons, which is the equivalent of 1,578 55-gallon drums.

Module III of the HW Permit also describes two miscellaneous (Subpart X) Compactor Units. Each unit uses a plunger/pressure plate to separate waste into solid and liquid phases in a solids drum or container. Both units are located in SA-5, and each compactor can process up to 41 drums in one hour, resulting in an approximate combined treatment capacity of 37,500 lbs/hour. If liquid is present in a drum of hazardous waste, it rises above the plunger within the freeboard of the drum as the contents are compressed. As a result of this separation, employees are then able to pump the free liquids from the drum into a storage tank or container using an air diaphragm pump and flexible piping. Additional wastes from other drums are added to the original drum and the compaction is repeated until the drum is full. Full drums are either emptied into a roll-off container and shipped off-site as solid waste fuel or they are closed, labeled, and sent off-site for disposal.

The facility receives and processes hazardous waste organic solvents, which may include both chlorinated and non-chlorinated organic industrial solvents, through its on-site tank systems. Module IV of the HW Permit ("Tanks") identifies a total of 21 hazardous waste storage tanks, which have a combined storage capacity of 355,545 gallons. The storage tanks are located in four tank storage areas: the 30-Series Tanks 1724A, 1725A, 1725B, 1726, 1728A, 1728B, 1734A, 1734B, 1735A, 1735B, 1736A, and 1736B are located in Storage Area 2 (SA-2); the 40-Series Tanks 1746 and 1747 are located in Storage Area 3 (SA-3); the 40-Series Tanks 1741, 1742, and 1743 are located in Storage Area 4 (SA-4); and tanks BP-1, BP-2, BP-3, and BP-4 are located in Storage Area 7 (SA-7). Tanks BP-1, BP-2, BP-3 and BP-4 are blended fuel storage tanks used to produce an alternative fuel of a consistent quality for use in an industrial furnace. Tanks 1728A, 1728B, 1741, 1742, 1743, 1746 and 1747 are used as feedstock tanks associated with the facility solvent distillation and recycling process and as waste fuel storage tanks. Tanks 1724A, 1725A, 1725B and 1726 are used for hazardous waste storage and blending. Nova is named as an additional operator for tanks 1741, 1742, 1743, 1746, 1747, 1734A, 1735A, and 1736A.

Module X of the Permit ("Miscellaneous Unit") describes the Hydropulper Unit System (HP-1) located within SA-5. HP-1 is classified as a Miscellaneous Unit that performs mechanical processing of hazardous waste. The system consists of one 2,375-gallon vessel (tank), a drum conveyor, one pump, two hydraulic drum augers, a drip pan, a chute, piping from HP-1 to Hazardous Waste Fuel Blending Tanks BP-1, BP-2, BP-3, and BP-4, and the closed vent system

that includes two carbon canisters. HP-1 is used to accumulate materials from non-bulk containers (i.e., 55-gallon drums) and produce a homogenized blend that can be pumped directly into the BP tanks. The drum tipping capacity, or treatment capacity of HP-1 is 79,200-gallons per day (1,440 55-gallon drum equivalents).

Both GRR and Nova are also large quantity generators of hazardous waste at the subject facility. Hazardous waste generated on-site are managed in satellite accumulation areas (SAAs), central accumulation areas (CAAs), less than 90-day storage tanks, and the permitted container storage areas. SAAs are located in the laboratories, at each permitted container storage area, in the maintenance area, at HP-1, and in the BP Tank Farm. CAAs are located at SA-6, at the Roll-Off container storage area, outside the distillation control room, and at the 20-series pad. Nova operates tanks T-107, T-207, T-208, T-211 and T-212 as less than 90-day hazardous waste storage tanks. According to the Permit, materials that are accepted at the facility but cannot be reclaimed or blended as fuel onsite are stored in permitted storage areas and then sent off-site to a permitted disposal facility as site-generated waste.

10) Opening Conference

On 05/04/2021, EPA inspector Laurie Benton DiGaetano, accompanied by SCDHEC inspectors Tom Richmond and Earle Watson arrived at the GRR and Nova facility at approximately 9:00 a.m. Mr. Steve Bargeron, GRR's Environmental Health and Safety Manager, immediately received the inspectors. Mr. Bargeron led the inspectors to a conference room, where they joined Mr. Lane Smith, Giant Cement's Manager of Environmental Health and Safety, and Mr. Timothy Boyd, GRR's Plant Manager. The inspectors introduced themselves, showed their credentials, and explained the purpose of the visit.

Mr. Smith, Mr. Boyd and Mr. Bargeron provided an overview of the facility's history and current operations during the opening conference. The Small Business Administration generally sets the Small Business Regulatory Enforcement Fairness Act classification of a "small business" using the business' SIC/NAICS code and annual receipts or number of employees. Although the EPA inspector did not provide a copy of the agency's information sheet for small businesses, this information can be found at https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf.

The inspectors described the anticipated use of a digital camera during the inspection and provided a request for records. 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. Smith, Mr. Boyd, and Mr. Bargeron led the inspectors on a tour of the GRR operations at the facility.

On 05/05/2021, the inspectors were joined by Mr. Raheem Lloyd, Nova's Environment Health and Safety Manager, Mr. Brandon Ardis, Nova's Safety Supervisor, and Mr. Kevin Carter, Nova's Operator. Mr. Lloyd, Mr. Ardis, and Mr. Carter led the inspectors on a tour of the Nova operations at the facility.
On 06/24/2021, EPA inspectors Laurie Benton DiGaetano, Parvez Mallick and David

Champagne, accompanied by SCDHEC inspectors Tom Richmond, Earle Watson and SCDHEC permitting personnel Jeff Herbig and Barbara Dankmyer arrived at the facility at approximately 10:55 am with air purifying respirators in order to observe the hydropulper unit in operation. The inspection team was greeted by Ms. Janice Timpson, GRR's new Environment Health & Safety Manager. Ms. Timpson and Mr. Boyd joined the inspectors to view the hydropulper unit, explained the operation of the unit and provided requested records concerning operation of the unit.

11) Findings

Waste Receiving in SA-6: Incoming shipments are currently received and processed at the facility's Upper Drum Building (SA-6), although the facility has plans to relocate these activities to the Lower Drum Building (SA-5). Module III of the HW Permit ("Containers") indicates that the facility is planning to construct a new portion of the Lower Drum Building for additional container storage and will close the Upper Drum Building (SA-6) when the construction is complete. Although Section D of the current Permit Application ("Process Information") does not include a description of the existing Upper Drum Building, Module III of the Permit ("Containers") includes a storage capacity limit in SA-6.

According to the Permit Application, the facility typically receives approximately 700 to 1,000 containers per day, and the majority of these containers are 55-gallon carbon steel drums. All waste shipments received at this facility must be off-loaded into a permitted storage area within 24 hours, and operators should inspect them for proper labeling and condition as the incoming containers are unloaded. Manifests should be reviewed and verified, and samples of the container contents should be taken to the on-site laboratory for analysis. Containers may be moved into a designated staging area while waste analysis is being completed, but no containers should be processed until they are released by the laboratory.

Although the Permit describes a barcoding system for tracking containers received and managed at the facility, no barcoding system was observed during the inspection. Instead, personnel explained that the standard procedure for identifying and tracking containers is to mark a unique tracking number onto each container using a grease pen. The inspectors observed these grease-pen tracking numbers on containers in SA-5 and SA-6 during the inspection. The facility uses a tracking sheet to document the associated profile number, manifest number, number of containers, name of the generator, and the processing destination for each container. Laboratory personnel determine the processing designation using fingerprint analytical results. Containers may be managed on-site using reclamation, volume consolidation/reduction, fuel blending, or storage, or they may be rejected back to the generator or alternate TSDF. Operators at the drum processing building use information from the tracking sheet to place containers into the designated staging areas for the appropriate processing destination.

> **Pursuant to HW Permit SCD036275626, Section I.E.1. - Duty to Comply, the Permittee shall comply with the Approved Permit Application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for**

enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application (R.61-79.270.30(a) [40 C.F.R. § 270.30(a)]). HW Permit SCD036275626, Section III.A.-Module Highlights references a complete description of the container storage area found in Section D (page D-6) of the Approved Permit Application, which states that GRR typically uses bar code scanning system as a means of managing containers through the facility.

The facility commonly manages organic solvents, which may include both chlorinated and non-chlorinated organic industrial solvents, and waste that is incompatible with this material is not normally received or managed here. Incompatible materials should be screened out during the potential new generator waste stream's pre-acceptance profile review. However, facility personnel may determine that a received waste is incompatible during incoming shipment inspections or through laboratory analytical testing. Similarly, the on-site laboratory may occasionally generate acid or caustic waste that may be incompatible with the wastes normally received and managed on-site. In the event that an incompatible waste is identified, the Permit requires that containers of incompatible waste to be physically separated from other incompatible wastes while in storage by means of a dike, berm, or portable containment pallet prior to being shipped offsite.

Laboratories: Although the sample testing and analyses performed at the facility are discussed in the HW Permit, the laboratory areas are not described. During the inspection, the inspectors visited Laboratories 208, 215 and the Front Laboratory. The facility manages one SAA in each laboratory for accumulating laboratory waste such as samples that have been collected on-site and analyzed in the laboratory.

The inspectors observed one 1-gallon container, one 5-gallon bucket, and one 15-gallon flip-top flammable can for accumulating hazardous waste in Laboratory 215. The 1-gallon container was labeled hazardous waste flammable liquid and identified with a flammable liquid DOT hazard placard; and the 5-gallon bucket and the 15-gallon can were each labeled hazardous waste solids containing flammable liquids (acetone / toluene) and identified with a flammable solid DOT hazard placard.

The inspectors observed two 15-gallon flip-top flammable cans on the floor, two 5-gallon containers under laboratory hoods, and two 5-gallon containers on laboratory counters for accumulating hazardous waste in Laboratory 208. Each 15-gallon container was labeled hazardous waste solids containing flammable liquids (acetone/toluene) and identified with a flammable solid DOT hazard placard. Each 5-gallon container was labeled hazardous waste flammable liquids (acetone/xylene) and identified with a flammable liquid DOT hazard placard.

The inspectors observed one 15-gallon flip-top flammable can and one 5-gallon container for accumulating hazardous waste generated in the Front Laboratory. The 15-gallon container was labeled hazardous waste solids containing flammable liquids (acetone/toluene) and identified with a flammable solid DOT hazard placard; and the 5-gallon container was labeled hazardous waste flammable liquids (acetone/xylene) and identified with a flammable liquid DOT hazard placard.

Container Storage in SA-6 and SAA: The inspection participants conducted a visual inspection

of the SA-6 container storage area, walking down each storage aisle and examining the accessible storage containers. The inspectors observed an emergency shower and eyewash station in this storage area.

In SA-6, the inspectors observed a row of hazardous waste containers within a secondary containment area separated from the main storage area by a concrete dike. Personnel explained that this area is used to stage materials that are received by the facility that will not be processed on-site. Among the containers observed in this area, the inspectors noted a small hole on the top of one 55-gallon drum, which was labeled as D001 hazardous waste aerosol can cylinders generated by GRR Sumter and marked with an accumulation start date of 04/11/2021 (Photo 1), and a missing bung on another 55-gallon drum, which was labeled as D005/D006/D007/D008 hazardous waste paint filters (Photo 2). The inspectors observed a third 55-gallon drum in this area that was labeled hazardous waste flammable aerosol can/cylinders, but was not labeled with generator information, EPA waste codes, or an accumulation start date (Photo 3).

Pursuant to HW Permit SCD036275626, Section I.E.1.-Duty to Comply, the Permittee shall comply with the Approved Permit Application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application (R.61-79.270.30(a) [40 C.F.R. § 270.30(a)]). HW Permit SCD036275626, Section VIII.A.-Module Highlights, references a complete description of the container storage area found in Section D (page D-7) of the Approved Permit Application, which states that containers are inspected for compliance with the RCRA/SCHWMR requirements after unloading, including proper labeling and condition. Incoming containers whose labels are damaged or incorrect are labeled with the statement "Hazardous Waste" and the appropriate hazard waste code/number.

Pursuant to HW Permit SCD036275626, Section VIII.B.2.-Storage Prohibition, which incorporates 25 S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], the storage of hazardous wastes restricted from land disposal is prohibited unless an owner / operator of a hazardous waste treatment, storage or disposal facility stores such wastes solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and each container is clearly marked to identify its contents with the applicable EPA hazardous waste numbers, an indication of the hazards of the contents, and the date each period of accumulation begins.

Pursuant to HW Permit SCD036275626, Section III.E.-Management of Containers, the Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner that may rupture the container or cause it to leak (R.61-79.264.173 [40 C.F.R. § 264.173]).

The facility manages a SAA in this area for accumulating floor sweepings and used personal protective equipment (PPE). The inspectors observed one 55-gallon drum in this SAA. The drum was identified by the waste profile number F0531 and labeled as hazardous waste solids containing xylene and toluene, but it was not marked with an indication of the hazards of its contents.

> **Pursuant to 25 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 25 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 25 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 25 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").**
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> **Pursuant to 25 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.**

Containers of hazardous waste stored in the main storage area were arranged on seven rows of pallets, separated by aisle spacing. Among the containers of hazardous waste stored in this area, the inspectors observed one supersack with the identification number 21-4-22-25, which was not labeled with the words "Hazardous Waste" (Photo 4); one 220-gallon tote labeled hazardous waste, which was open due to a missing cap; and one overpack drum, which was not labeled or marked with the words "Hazardous Waste," the waste code, an indication of the hazards of its contents, or the date that accumulation began because the hazardous waste labeled had been crossed out (Photo 5).

> **Pursuant to HW Permit SCD036275626, Section III.E.-Management of Containers, the Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner that may rupture the container or cause it to leak (R.61-79.264.173 [40 C.F.R. § 264.173]).**
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> **Pursuant to HW Permit SCD036275626, Section I.E.1.-Duty to Comply, the Permittee shall comply with the Approved Permit Application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or**

denial of a permit renewal application (R.61-79.270.30(a) [40 C.F.R. § 270.30(a)]). HW Permit SCD036275626, Section VIII.A.-Module Highlights, references a complete description of the container storage area found in Section D (page D-7) of the Approved Permit Application, which states that containers are inspected for compliance with the RCRA/SCHWMR requirements after unloading, including proper labeling and condition. Incoming containers whose labels are damaged or incorrect are labeled with the statement "Hazardous Waste" and the appropriate hazard waste code/number.

Pursuant to HW Permit SCD036275626, Section VIII.B.2.-Storage Prohibition, which incorporates 25 S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], the storage of hazardous wastes restricted from land disposal is prohibited unless an owner/operator of a hazardous waste treatment, storage or disposal facility stores such wastes solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and each container is clearly marked to identify its contents with the words "Hazardous Waste," the applicable EPA hazardous waste numbers, an indication of the hazards of the contents, and the date each period of accumulation begins.

The facility operates a CAA for managing hazardous wastes generated in the on-site laboratories in this area. The inspectors observed one 55-gallon drum in this CAA. The drum was equipped with a funnel, it was labeled as hazardous waste flammable liquid (acetone, xylene), and it was dated 04/23/2021 (Photo 6).

The facility manages universal waste in an area next to the CAA. The inspectors observed approximately seven boxes of 4-foot universal waste lamps, one box of 8-foot universal waste lamps, and three boxes of miscellaneous universal waste lamps in this area. Each box was closed, dated, and labeled as universal waste lamps. The oldest box was dated 07/09/2020.

Container Storage in SA-5: The inspectors also observed hazardous waste containers stored on rows of pallets approximately three pallets long and stacked two pallets high in SA-5. Among the containers of hazardous waste observed in this area, the inspectors noted two 55-gallon drums of F003/F005/D001/D035/D004/D005/D006/D007/D008/D019 hazardous waste paint cans and two 55-gallon drums of F005/F003/F004/F001/F002/D001/D004/D005 hazardous waste solid (xylene/toluene). Each of these containers was identified with a flammable liquid DOT hazard placard, but none were identified with an indication that the contents are toxic. The inspectors also observed four 55-gallon drums of F005/F003/F004/F001/F002/D001/D006/D005 hazardous waste solid (xylene/toluene). Each of these containers was identified with a Class 9 DOT hazard placard. One drum had a portion of a flammable hazard placard, which was part of a previous product label which had been torn off, but none of the containers were clearly identified with an indication that the contents are flammable or toxic (Photo 7).

Pursuant to HW Permit SCD036275626, Section VIII.B.2.-Storage Prohibition, which incorporates 25 S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], the storage of hazardous wastes restricted from land disposal is prohibited unless an owner/operator of a hazardous waste treatment, storage or

disposal facility stores such wastes solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and each container is clearly marked to identify its contents with an indication of the hazards of the contents.

The inspectors observed one tote of hazardous waste located stacked above other waste containers in this area. No hazardous waste label was observed on the tote, which was marked with the tracking number 21-2-16-30. Using a forklift, facility personnel brought the tote down to the floor where the inspectors observed that the top of the tote had been cut, leaving the container open and in poor condition (Photo 8). Facility personnel retrieved the container label, which had fallen into the open container. The label indicated that this tote contained D001/D035/F003/F005 hazardous waste flammable liquid (toluene/MEK).

Pursuant to HW Permit SCD036275626, Section III.C.-Condition of Containers, if a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit and the requirements of R.61-79.264 Subpart I (R.61-79.264.171 [40 C.F.R. § 264.171]).

Pursuant to HW Permit SCD036275626, Section III.E.-Management of Containers, the Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner that may rupture the container or cause it to leak (R.61-79.264.173 [40 C.F.R. § 264.173]).

Pursuant to HW Permit SCD036275626, Section I.E.1.-Duty to Comply, the Permittee shall comply with the Approved Permit Application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application (R.61-79.270.30(a) [40 C.F.R. § 270.30(a)]).
HW Permit SCD036275626, Section VIII.A.-Module Highlights, references a complete description of the container storage area found in Section D (page D-7) of the Approved Permit Application, which states that containers are inspected for compliance with the RCRA / SCHWMR requirements after unloading, including proper labeling and condition. Incoming containers whose labels are damaged or incorrect are labeled with the statement "Hazardous Waste" and the appropriate hazard waste code / number.
Pursuant to HW Permit SCD036275626, Section VIII.B.2.-Storage Prohibition, which incorporates 25 S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], the storage of hazardous wastes restricted from land disposal is prohibited unless an owner / operator of a hazardous waste treatment, storage or disposal facility stores such wastes solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery,

treatment or disposal and each container is clearly marked to identify its contents with the words "Hazardous Waste," the applicable EPA hazardous waste numbers, an indication of the hazards of the contents, and the date each period of accumulation begins.

The inspectors observed another 55-gallon drum of hazardous waste which was leaking onto the floor in this storage area (Photo 9). The inspectors observed a flammable liquid DOT hazard placard on the drum, and it appeared that the drum was identified with a hazardous waste label. The inspectors were not able to read the hazardous waste label, because it was facing away from the aisle and obscured by other waste containers.

Pursuant to HW Permit SCD036275626, Section III.C.-Condition of Containers, if a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit and the requirements of R.61-79.264 Subpart I (R.61-79.264.171 [40 C.F.R. § 264.171]).

Pursuant to HW Permit SCD036275626, Section I.E.1.-Duty to Comply, the Permittee shall comply with the Approved Permit Application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application (R.61-79.270.30(a) [40 C.F.R. § 270.30(a)]). HW Permit SCD036275626, Section VIII.A.-Module Highlights, references a complete description of the container storage area found in Section D (page D-16) of the Approved Permit Application, which states that containers labels are typically visible from an aisle.

Miscellaneous Subpart X Compactors and Solid Fuel Consolidation in SA-5: Some containers that are processed on-site contain material that cannot be either reclaimed or used in the on-site fuel blend tanks. These containers may be processed for volume reduction by compaction and/or consolidation. Containers with (and without) free liquids may be treated in SA-5 using one of two Miscellaneous Subpart X Compactor Units. The hazardous waste in a solids drum or container is compacted in the Compactor Unit using the plunger / pressure plates. This results in a phase separation in the original storage container. Any liquids that rise above the plunger / pressure plate are removed from the container using a pumping line. The liquids can be pumped to the storage tanks to be added to the on-site fuel blending tanks or shipped to a permitted TSD. The solids can be accumulated in a bulk container to facilitate transport to a permitted TSD or industrial furnace.

The tour of SA-5 began at the far end of the area where the two Subpart X Compactor Units are located and where containers of hazardous waste solids are consolidated into roll-off containers. The inspectors observed two roll-off containers staged for receiving consolidated wastes in this area. No waste consolidation or drum compacting operations were observed during the

inspection. The inspectors observed dried hazardous waste that had splashed, spilled, or leaked on the wall and floor surrounding the roll-off containers.

Pursuant to HW Permit SCD036275626, Section II.A.-Design and Operation of the Facility, the Permittee shall construct, maintain, and operate the facility in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by R.61.79-264.31 [40 C.F.R. § 264.31].

Pursuant to HW Permit SCD036275626, Section III.L.3., the Permittee shall prevent spills and overflows from the treatment units or containment systems pursuant to the Approved Permit Application and R.61-79.264.601 [40 C.F.R. § 264.601].

Pursuant to HW Permit SCD036275626, Section III.L.4., the Permittee shall operate and maintain the compactors in a manner such that prevents releases that may have adverse effects on human health or the environment due to the migration of waste constituents to the air. Containers used for the collection of solids or liquids should be kept closed when these systems are not in operation and/or at the end of each operating day (R.61-79.264.601(c) [40 C.F.R. § 264.601(c)]).

Roll-Off Containers CAA: Roll-off containers for bulk shipments of solid hazardous wastes are staged in a CAA near SA-5. The area is separated into six distinct bays and each bay can hold two rows of roll-off containers. The inspectors observed five 40-yard roll-off containers of hazardous waste stored in this area during the inspection. Each container was closed, marked with an accumulation start date, and labeled hazardous waste solids (xylene/toluene) (Photo 10). The oldest container was dated 02/15/2021. None of the containers were marked with an indication of the hazards of its contents. The inspectors also observed six 40-yard roll-off containers, which appeared to be empty, and one 40-yard roll-off container, which was labeled non-hazardous waste, in this area.

Pursuant to 25 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 25 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 25 S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i)(B) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with an indication of the hazards of the contents.

The inspectors also observed three tractor trailers which contained drums of hazardous waste and four empty tractor trailers in the Roll-off Container CAA. Of the three trailers containing waste, one was full of 55-gallon drums and the other two were partially full of 55-gallon drums (Photos

11–14). According to facility personnel, these trailers are being used to store containers of hazardous waste that were accepted at the facility from off-site generators. Personnel indicated that the initial manifest records terminated shipment here when the containers were received on-site; that the material will not be processed on-site; and that the drums will be re-labeled as GRR generated waste and then loaded onto another trailer for transport off-site to a permitted TSD.

> **Pursuant to HW Permit SCD036275626, Section I.A.-Effect of Permit, any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit is prohibited, except as allowed by the South Carolina Hazardous Waste Management Regulations, R.61-79 [40 C.F.R. § 270].**

Miscellaneous Subpart X Hydropulper Unit System (HP-1) and SAA in SA-5: According to the Permit, the majority of containers received by the facility are processed through HP-1 before the material can be introduced into the permitted fuel blend tanks. To operate the hydropulper unit system, a forklift operator places two drums of hazardous waste onto the conveyor at one time. Once the drums are placed, the drive section of the conveyor moves the drums to the non-driven section of the conveyor, where the drums are staged while GRR personnel remove the drum lids (i.e., de-heading the drums). The de-headed drums are then moved to the driven section of the conveyor, where they are conveyed onto the drum auger carriage. Here, a seal between the top of the drums and the auger is made by lifting the floor of the carriage and pushing the drums up to connect them with the auger. Once a connection and seal are made, the auger tilts up into the empty position, so that the contents of the drums can transfer from the drums into the hydropulper vessel. After the waste is transferred, the drum auger carriage returns to its downward position and releases the empty drums onto the conveyor. The drums are then moved to the end of the conveyor and removed by GRR personnel. These steps continue until the hydropulper vessel reaches the full level, or the vessel contains material with a target consistency for emptying into the BP Tanks and a working volume typically less than 2,000 gallons.

Inside the hydropulper vessel, a pump and mixer continuously recirculate the material to produce a homogenously blended material. Once the material has reached the desired consistency, it is pumped through a perforated plate inside the bottom of the vessel and transferred directly into a fuel blending storage tank (e.g., BP-1, BP-2, BP-3, or BP-4). No hydropulper operations were observed on 05/04/2021 or 05/05/2021.

According to facility personnel, waste that leaks or spills in the area surrounding the hydropulper unit System is scraped up and the area is cleaned on a frequency between once each day to once each week. Personnel also stated that the unit is cleaned using a pressure washer about one or two times each month. Personnel explained that the dirty water generated by pressure washing is collected in the diked area and then pumped into an on-site hazardous waste storage tank, and that the contents of the storage tank are pumped out and shipped off as hazardous waste when the tank is full. The inspectors observed significant volumes of spilled or leaked hazardous waste on the hydropulper vessel, on the decking, rails and conveyor and in the area surrounding the hydropulper unit system.

> **Pursuant to HW Permit SCD036275626, Section II.A.-Design and Operation of the Facility, the Permittee shall construct, maintain, and operate the facility in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or**

non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by R.61.79-264.31 [40 C.F.R. § 264.31].

Pursuant to HW Permit SCD036275626, Section I.E.6.-Proper Operation and Maintenance, the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of a backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit (R.61-79.270.30(e) [40 C.F.R. § 270.30(e)].

Pursuant to HW Permit SCD036275626, Section X.C.1.-Miscellaneous Unit with Secondary Containment, the permittee shall design, construct, and operate the secondary containment system and ancillary equipment in accordance with the detailed design plans and descriptions contained in Section D-7 of the Approved Permit Application (R.61-79.264.193(b)-(f) and 264.601(a)–(c) [40 C.F.R. § 264.193(b)-(f) and 264.601(a)-(c)]. Specifically, Section D-7 (page D-47) of the Approved Permit Application states that spills are visually detected and removed as they occur.

Pursuant to HW Permit SCD036275626, Section X.D.1.-Operation, the Permittee shall operate the Hydropulper Unit System as specified in Section D-7 of the Approved Permit Application. Specifically, Section D-7 (page D-47) of the Approved Permit Application states that spills are visually detected and removed as they occur. The Permittee shall operate and maintain the Hydropulper Unit System in a manner such that prevents releases that may have adverse effects on human health or the environment due to the migration of waste constituents to the air.

Pursuant to HW Permit SCD036275626, Section X.E.-Response to Leaks or Spills, in the event of a leak or spill from the Hydropulper Unit System, from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall remove the system from service immediately and (1) stop the flow of hazardous waste into the system and inspect the Hydropulper Unit System to determine the cause of the release; (2) remove waste accumulated precipitation from the system within 24 hours of the detection of the leak to prevent further release and to allow inspection and repair of the system; (4)(a) for a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the Hydropulper Unit System to service.

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans,

schedules, information and reports as contained in the Section M of the Part B Permit Application. Section M-3b - Methods of Compliance with Standards, 2. Miscellaneous (Hydropulper Unit System) (page M-9) states that transfers of hazardous waste from containers to the Hydropulper vessel are performed in a manner to minimize emissions.

The inspectors observed one SAA for managing hazardous waste solids generated in SA-5. The hazardous waste generated in this area includes floor clean-up debris and PPE. The inspectors observed one 55-gallon drum in the SAA, and another 55-gallon drum of this waste in a CAA within SA-5. Each drum was labeled hazardous waste solid (xylene/toluene) and identified with a Class 9 DOT hazard placard. Neither drum was marked with an indication that the contents are flammable or toxic. The drum in the CAA was marked with an accumulation start date of 05/03/2021.

Pursuant to 25 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.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i)(B) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with an indication of the hazards of the contents.

Container Disposal / Recycling in SA-5: Empty containers (i.e. 55-gallon drums) are typically shipped from this location for reuse or recycling. Empty containers destined for reuse are shipped offsite to a drum reconditioning facility by placing the empty containers on a trailer stacked two or three high for transport. Empty containers destined for recycling are crushed on-site to facilitate their economic transport to a scrap metal recycling facility. Facility personnel crush these empty containers using a drum crusher located in SA-5. The crushed drums are accumulated as scrap metal in a roll-off container located beside HP-1 in SA-5.

BP Series Tank Farm (SA-7) and SAA: Materials identified by the laboratory for fuels blending may also arrive on-site in containers and bulk tanker trucks. Incoming liquids in containers may be processed through the Compactor Units or HP-1 or may be pumped directly into the permitted storage tanks in SA-2, SA-3, or SA-4. Incoming liquids in tanker trucks are typically pumped directly into the permitted tanks in SA-2, SA-3, SA-4, or SA-7. The final fuel-blend mixture is managed in the blended fuel storage tanks (SA-7), which receive waste directly from bulk tankers, from the storage tanks in SA-2, SA-3, and SA-4, and from HP-1. Operators control the introduction of materials into the blended fuel storage tanks (SA-7) in order to produce a homogenous composition with the desired BTU value.
Four fuel blending and storage tanks, designated by the assigned tank numbers BP-1, BP-2, BP-3, and BP-4, are in the permitted fuel blend area SA-7. The HW Permit Application describes these tanks as vertical, flat bottom, aboveground storage tanks supported on concrete bricks. Because the tanks are equipped with top mounted agitators that are used to maintain homogeneity of the fuel, they are regulated as both hazardous waste treatment and storage tanks. The permitted storage capacity of the tanks is 20,000 gallons each. The interiors of the tanks are

uncoated carbon steel. The exterior tank surfaces are protected from corrosion with rust inhibiting paint coating. The coating is to be inspected daily and the shell thickness is to be tested biennially by ultrasonic methods. SA-7 is equipped with secondary containment.

The purpose of these fuel blending and storage tanks is to produce an alternative fuel of a consistent quality for use in industrial furnaces off site. As described above, wastes received in both bulk and non-bulk containers are added to these tanks based on their associated laboratory analyses. Samples of the agitated tank contents are analyzed for the desired blended fuel parameters, and shipments of alternative fuel can originate from one or more tanks from this area. The blended fuel is agitated prior to and during loading into the tanker for shipment off-site.

The inspectors observed the four fuel blend tanks, BP-1, BP-2, BP-3, and BP-4 in SA-7. Each tank was labeled as hazardous waste and marked to indicate that it contains flammable liquids. The inspectors observed several tags associated with ancillary equipment connected to the fuel blend tanks, and some of these tags were not legible (Photos 15 and 16). The inspectors could not read three tags located at the top of a filter house, one tag located between the filter and a pump, another tag on the other side of the filter and two tags at the bottom of tank BP-4.

Pursuant to HW Permit SCD036275626, Section IV.D.3.-Air Emission Standards, the Permittee shall insure that all hazardous waste placed in tanks is managed in compliance with R.61-79.264.200 [40 C.F.R. § 264.200]. Pursuant to R.61-79.264.200 [40 C.F.R. §264.200], which incorporates R.61-79.264 Subpart BB [40 C.F.R. Part 264 Subpart BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, which incorporates the applicable requirements of R.61-79.264 Subparts AA and BB [40 C.F.R. Part 264 Subparts AA and BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information and reports as contained in the Section M of the Part B Permit Application. Section M-2a-Identification of Equipment (page M-2) states that each piece of equipment listed in the table has or will be marked so that it can be readily distinguished for other equipment at the facility. In the event that a marking becomes detached from the equipment, it shall be replaced as soon as practicable, but in no case later than 15 days from discovery.

GRR manages a SAA in SA-7 for accumulating hazardous waste solids generated in HP-1 and the lines connecting HP-1 to the BP tanks. This SAA is also used to accumulate residual waste that may need to be drained from hoses and connections. The inspectors observed one 55-gallon

drum in this SAA. The drum was closed and labeled hazardous waste solids, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 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.

Permitted Storage Tank Systems: Although not all of the tanks have been constructed, the Permit allows GRR and Nova to store a total of 355,545 gallons of hazardous waste in a total of 21 permitted storage tanks. Tank numbers 1724A, 1725A, 1725B, 1726, 1728A, 1728B, 1734A, 1734B, 1735A, 1735B, 1736 A, and 1736B are located in SA-2; tank numbers 1746 and 1747 are located in SA-3; tank numbers 1741, 1742 and 1743 are located in SA-4; and tank numbers BP-1, BP-2, BP-3, and BP-4 are located in SA-7.

The inspectors observed tank numbers 1734A, 1734B, 1735A, 1735B, 1736A and 1736B in SA-2. Tank numbers 1734A, 1735A, and 1736A are all jointly operated by GRR and Nova. Tank numbers 1734B, 1735B and 1736B are all owned and operated solely by GRR. Each of these tanks was labeled as hazardous waste and marked to indicate that it contains flammable liquids. The inspectors observed areas of secondary containment in SA-2 with significant cracks, peeled and missing coating (Photo 17). According to facility personnel, this area is due for secondary containment repair and the facility has requested bids to complete the project. The condition of the secondary containment unit remained unchanged between the initial site visit on 05/04/2021 and the return visit on 06/24/2021.

Pursuant to HW Permit SCD036275626, Section IV.C.1., the Permittee shall design, construct, and operate the secondary containment system and ancillary equipment with the detailed design plans and descriptions contained in Section D of the Approved Permit Application (R.61-79.264.193(b)-(f) [40 C.F.R. §264.193(b)-(f)]). Specifically, Section D (page D-26) of the Approved Permit Application states that an impervious coating has been applied to the concrete slab and wall surrounding the tanks and (page D-33) that the secondary containment is equipped with an epoxy polyamide coating with fiberglass matting (or a functionally equivalent replacement).

Pursuant to HW Permit SCD036275626, Section IV.C.2.-Secondary Containment and Tank System Integrity Assessments, the Permittee shall maintain all the secondary containment systems free of cracks or gaps and sufficiently impervious to contain leaks, spills, and accumulated precipitation until removed (R.61-79.264.193(b) and (e) [40 C.F.R. § 264.193(b) and (e)].

The inspectors observed several tags associated with ancillary equipment connected to Tank 1736B which were not legible (Photo 18).

Pursuant to HW Permit SCD036275626, Section IV.D.3. - Air Emission Standards, the Permittee shall insure that all hazardous waste placed in tanks is managed in compliance with R.61-79.264.200 [40 C.F.R. § 264.200]. Pursuant to R.61-79.264.200

[40 C.F.R. § 264.200], which incorporates R.61-79.264 Subpart BB [40 C.F.R. Part 264 Subpart BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, which incorporates the applicable requirements of R.61-79.264 Subparts AA and BB [40 C.F.R. Part 264 Subparts AA and BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information and reports as contained in the Section M of the Part B Permit Application. Section M-2a - Identification of Equipment (page M-2) states that each piece of equipment listed in the table has or will be marked so that it can be readily distinguished for other equipment at the facility. In the event that a marking becomes detached from the equipment, it shall be replaced as soon as practicable, but in no case later than 15 days from discovery.

The inspectors observed tank numbers 1746 and 1747 in SA-3. Each of these tanks was labeled as hazardous waste and marked to indicate that it contains flammable liquids.

The inspectors observed tank numbers 1741, 1742 and 1743 in SA-4. Tank numbers 1742 and 1743 were each labeled as hazardous waste and all three tanks were marked with a National Fire Protection Association Fire Diamond. The hazardous waste label on tank number 1741 had peeled off so that it was no longer legible (Photo 19).

Finally, the inspectors observed cracks in the coating which had been applied to the secondary containment of SA-4.

Pursuant to HW Permit SCD036275626, Section IV.C.1., the Permittee shall design, construct, and operate the secondary containment system and ancillary equipment with the detailed design plans and descriptions contained in Section D of the Approved Permit Application (R.61-79.264.193(b)-(f) [40 C.F.R. § 264.193(b)-(f)]). Specifically, Section D (page D-26) of the Approved Permit Application states that an impervious coating has been applied to the concrete slab and wall surrounding the tanks and (page D-39) that the secondary containment is equipped with an epoxy polyamide coating with fiberglass matting (or a functionally equivalent replacement) that meets the impervious specification included in the Subpart J Standards for secondary containment systems.

Material is transferred into or out of the tanks using either a portable pneumatic pump, a truck pump, or a centrifugal pump. According to the Permit Application, most connections to the pumps and storage tanks are made using OPW-type quick disconnects and flexible hoses. The

disperser tanks are hard piped to the blended fuel storage tanks. The blended fuel storage tanks are hard-piped to the process piping system and to a common manifold with an OPW-type quick disconnect fitting. The inspectors observed an open-ended line at the cam-lock fitting that was identified with tag number 572 (Photo 20). This open-ended line was not sealed with a cap, blind flange, plug or second valve.

> **Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, which incorporates the applicable requirements of R.61-79.264 Subparts AA and BB [40 C.F.R. Part 264 Subparts AA and BB], each open-ended valve or line shall be equipped with a cap, blind flange, plug or a second valve and the cap, blind flange, plug or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line as required by R.61-79.264.1056(a) [40 C.F.R. § 264.1056(a)].**

> **Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information and reports as contained in the Section M of the Part B Permit Application. Section M-2b-Method of Compliance with Standards (page M-3) states that each open-ended valve or line is equipped with a cap, blind flange, and plug, or a second flange, and plug or a second valve.**

Although similar connections in SA-4 were dry, the inspectors observed liquid at the connection identified with tag #583 (Photos 21 and 22). This liquid could be evidence of a leak at the connection.

The inspectors did not observe any tags to readily distinguish ancillary equipment connected to the bottom of hazardous waste storage tank T-1743 from other pieces of equipment.

> **Pursuant to HW Permit SCD036275626, Section IV.D.3.-Air Emission Standards, the Permittee shall insure that all hazardous waste placed in tanks is managed in compliance with R.61-79.264.200 [40 C.F.R. § 264.200]. Pursuant to R.61-79.264.200 [40 C.F.R. § 264.200], which incorporates R.61-79.264 Subpart BB [40 C.F.R. Part 264 Subpart BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].**

> **Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, which incorporates the applicable requirements of R.61-79.264 Subparts AA and BB [40 C.F.R. Part 264 Subparts AA and BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].**

> **Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans,**

schedules, information and reports as contained in the Section M of the Part B Permit Application. Section M-2a - Identification of Equipment (page M-2) states that each piece of equipment listed in the table has or will be marked so that it can be readily distinguished for other equipment at the facility. In the event that a marking becomes detached from the equipment, it shall be replaced as soon as practicable, but in no case later than 15 days from discovery.

Reclamation: Nova operates one full-scale distillation system on-site which consists of numerous units that can be operated in various configurations. At the time of the inspection, Nova was in the process of constructing a pilot-scale distillation system to conduct smaller scale distillation operations. The distillation systems are (will be) used to process both hazardous and non-hazardous materials and the hazardous waste feedstock principally consists of spent acetone, methyl ethyl ketone, methylene chloride, perchloroethylene, toluene, and xylene.

Material identified by the laboratory for processing on-site in Nova's distillation unit may arrive on-site in containers or bulk tanker trucks, and it may either be pumped into a storage tank or it may be pumped directly into the distillation system. If it is stored prior to processing, hazardous waste destined for reclamation must be managed in a permitted container storage area or pumped into one of the permitted storage tanks before it is introduced into the distillation system. Tanks used for accumulating and storing still bottoms and hazardous wastes generated in the distillation process are managed in less than 90-day hazardous waste tanks. These wastes are used in the fuels blending process or they are sent off-site for treatment and/or disposal at a permitted TSD facility.

The inspectors observed missing bolts at connections of ancillary equipment associated with TA-9A and TA-172 in the distillation area, and missing tags on equipment associated with this process area (Photos 23–25).

Pursuant to HW Permit SCD036275626, Section IV.D.3.-Air Emission Standards, the Permittee shall insure that all hazardous waste placed in tanks is managed in compliance with R.61-79.264.200 [40 C.F.R. § 264.200]. Pursuant to R.61-79.264.200 [40 C.F.R. § 264.200], which incorporates R.61-79.264 Subpart BB [40 C.F.R. Part 264 Subpart BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.-Emission Control Technology, which incorporates the applicable requirements of R.61-79.264 Subparts AA and BB [40 C.F.R. Part 264 Subparts AA and BB], each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment as required by R.61-79.264.1050(d) [40 C.F.R. § 264.1050(d)].

Pursuant to HW Permit SCD036275626, Section IX.B.–Emission Control Technology, the Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information and reports as contained in the Section M of the Part B

Permit Application. Section M-2a - Identification of Equipment (page M-2) states that each piece of equipment listed in the table has or will be marked so that it can be readily distinguished for other equipment at the facility. In the event that a marking becomes detached from the equipment, it shall be replaced as soon as practicable, but in no case later than 15 days from discovery.

The inspectors observed the less than 90-day hazardous waste storage tank numbers T-207, T-208, T-211 and T-212, which are operated by Nova. Each of these tanks was labeled D001/D035/F003/F005 hazardous waste and marked with a NFPA fire diamond. The inspectors observed severe corrosion on the tags associated with ancillary equipment connected to tank T-212 (Photo 26). The corrosion caused the information on the tags to be illegible.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(2) [40 C.F.R. § 262.17(a)(2)], which incorporates R.61-79.265.1050(c) [40 C.F.R. § 265.1050(c)] and is a condition of the LQG Permit Exemption, a generator must mark each piece of equipment to which R.61-79.265 Subpart BB [40 C.F.R. § 265 Subpart BB] applies in such a manner that it can be distinguished readily from other pieces of equipment.

Outside Distillation Control Room CAA and SAA: Nova operates one CAA and one SAA in the area outside of the Distillation Control Room for accumulating hazardous waste generated in the distillation process. The area is equipped with a fire extinguisher, emergency shower and eyewash station, and spill control equipment. The inspectors observed a number of empty 10-gallon buckets beneath tank number T-4. These buckets were labeled as hazardous waste and used to transfer material from the points of generation into the 55-gallon storage containers in the CAA.

The inspectors observed three 55-gallon drums in the CAA. The first 55-gallon drum is used to accumulate empty bags of sodium persulfate. The drum was closed, labeled D001 hazardous waste sodium persulfate, dated 05/05/2021, and identified with an oxidizer DOT hazard placard. The second 55-gallon drum is used to accumulate waste gas chromatography vials from the laboratory. The drum was closed, labeled D001/D035/F003/F005 hazardous waste flammable liquids (ethyl acetate/MEK), dated 04/05/2021, and identified with a flammable liquid DOT hazard placard. The third drum is used to accumulate distillation products and bottoms. The drum was equipped with a closed funnel, labeled D001/D035/F003/F005 hazardous waste, dated 04/27/2021, and identified with a flammable liquid DOT hazard placard.

The inspectors observed one 55-gallon drum for accumulating used PPE and debris in the SAA. The drum was closed and labeled D035/F003/F005 hazardous waste solid (toluene/xylene). The drum was identified with a Class 9 DOT hazard placard, but it was not marked to indicate that the contents are flammable or toxic.

Pursuant to 25 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.

20-Series Pad CAA: Nova operates another CAA next to the SA-2 storage pad for accumulating

hazardous waste generated in the distillation process. The inspectors observed a total of eight 55-gallon drums in this area (Photo 27). One drum, which was used to accumulate empty sodium persulfate bags, was closed, labeled D001 hazardous waste, dated 04/05/2021, and identified with an oxidizer DOT hazard placard. The remaining drums, which were staged on a row of wooden pallets, were used to accumulate used PPE and debris. Each drum was closed, labeled D035/F003/F005 hazardous waste PPE and debris, marked with an accumulation start date, and identified with a Class 9 DOT hazard placard. The oldest drum in this CAA was dated 03/31/2021.

Maintenance Area: The facility's on-site maintenance activities are performed by Nova personnel. The facility manages one used oil accumulation area and one SAA in this area. The inspectors observed one 55-gallon drum labeled used oil and another 55-gallon drum labeled used oil filters in the used oil accumulation area. The inspectors observed one 55-gallon drum for accumulating the contents of waste aerosol cans in the SAA. The drum was equipped with an aerosol can puncture device, and it was labeled D001 hazardous waste flammable liquids. The inspectors recommended adding a flammable liquid DOT hazard placard to the container in order to maintain improve the visibility for communicating the hazards of the contents of this drum. Facility personnel stated that the drum has never been filled, and the filter has not required changing.

Records: The hazardous waste training records for Nova personnel, manifest records for shipments of hazardous waste generated by Nova operations, records of daily and weekly inspections conducted by Nova personnel, and records of air monitoring conducted on behalf of Nova are not kept at the facility. The inspectors reviewed these records at the Nova facility located at 208 South Magnolia Street, Sumter, South Carolina.

> **Pursuant to HW Permit SCD036275626, Section I.I.4.-Personnel Training documents and records, which incorporates R.61-79.264.16(d)(4) [40 C.F.R. § 264.16(d)(4)], the Permittee shall maintain at the facility records that document that the training or job experience required under paragraphs (a), (b), and (c) of R.61-79.264.16 [40 C.F.R. § 264.16] has been given to, and completed by, facility personnel.**
>
> **Pursuant to HW Permit SCD036275626, Section I.I.11.-All Other Documents, the Permittee shall retain records of all monitoring information required under Section I.E.9(b)(i) of the permit, including all calibration and maintenance records at the facility, or at another location as approved by the Department.**

Contingency Plan: The actions that facility personnel should take in response to an emergency are described in the facility's Contingency Plan, which was last updated in November 2019. The plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility. The plan includes acknowledgement forms for arrangements agreed to with the Sumter Fire Department, the Sumter County Emergency Management Agency, the Sumter County Sheriff's Office, the Sumter City Police Department, and Palmetto Health Tuomey. The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators, and the individuals are listed in the order in which

they will assume responsibility as alternates. The plan includes a list of emergency equipment at the facility. The list includes fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment. The plan includes a map showing the location of each item on the list, and a brief outline of its capabilities. The plan includes an evacuation plan for personnel. This plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

A copy of the plan (and its quick reference guide) was submitted to Sumter County Sheriff's Office, City of Sumter Police Department, Sumter Fire Department, Palmetto Health Tuomey, and Sumter County Emergency Management.

The quick reference guide includes the types/names of hazardous waste in layman's terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; a street map of the facility in relation to surrounding businesses, schools and residential areas; the locations of water supply; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s).

Training Records: The inspectors reviewed facility job descriptions for the Facility Manager, Environmental Health and Safety Manager, Records / Receiving Manager, Records Manager, Records Leads and Clerks, Lab Manager, Lab Technician, Distillation Lead and Distillation Operators, Operations Managers, Waste Leads and Operators, Maintenance Supervisor, Maintenance Mechanics, Yard Lead Man/Technician, Drum Receiving Dock Leads and Samplers, Approvals Manager, and Approvals Chemist. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

The inspectors reviewed the written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed by Timothy Boyd, John Daughrity, Steve Bargeron, Rodergick Pugh and Maurice Cooper. During the 06/24/2021 visit to the facility, the inspectors noted that Mr. Boyd had been working at the facility for greater than six months, but the training records did not indicate that he had received Facility Orientation training or contingency plan training.

> **Pursuant to HW Permit SCD036275626, Section II.G.–Personnel Training, the Permittee shall conduct personnel training, as required by R.61-79.264.16 [40 C.F.R. § 264.16]. This training shall follow the outline described in Section H of the Approved Permit Application. Section H-1b-Training Content, Frequency, and Techniques 1. Initial Overall Training states that prior to assuming unsupervised work duties and within the first 6 months of hire, all new GRR employees involved with hazardous waste management and facility operation must complete training modules designed to introduce employees to facility layout and operations (Facility Orientation).**

Pursuant to HW Permit SCD036275626, Section II.G.–Personnel Training, the Permittee shall conduct personnel training, as required by R.61-79.264.16 [40 C.F.R. § 264.16]. This training shall follow the outline described in Section H of the Approved Permit Application. Section H-1c-Relevance of Training to Job Position states that all personnel receive contingency plan training.

Waste Manifest Records: The inspectors reviewed a random selection of GRR's hazardous waste manifest records and land disposal restriction forms for inbound and outbound shipments of hazardous waste sent during the months of June 2018, April 2019, and October 2020. The inspectors also reviewed Nova's hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent between 2018 and 2021.

Daily Inspection Records: GRR personnel provided records of inspections conducted at the 30-series hazardous waste storage tanks in SA-2, the horizontal 40-series hazardous waste storage tanks in SA-3, the cone-bottom 40-series hazardous waste storage tanks in SA-4, and the hazardous waste fuel blending tanks in SA-7; the hazardous waste central accumulation areas (CAAs) at the 20-series, 30-series and 40-series bulk storage unloading pads, the lower drum shed pad, and the multiple bay bulk outbound shipment pad; the drum receiving area in SA-6; the drum processing area in SA-5; and Subpart CC inspections of SA-5 and SA-6 since 2018. Nova personnel provided records of daily tank inspections conducted on Nova operated 20-series, 30-series, and 40-series tanks. The inspectors reviewed the records of GRR's daily inspections between 01/01/2019 and 06/30/2019 and the records of Nova's daily inspections between April 2020 and March 2021.

Inspections of the 30-series hazardous waste storage tanks in SA-2, the horizontal 40-series hazardous waste storage tanks in SA-3, the cone-bottom 40-series hazardous waste storage tanks in SA-4, and the hazardous waste fuel blending tanks in SA-7 were recorded on a three-part checklist for observations related to the tanks, the ancillary equipment, and the containment area. The tanks section of the checklist included a list to record observations of the tank's external condition and structural integrity; evidence of tank discoloration, bulging, or collapse; and the presence of signage, seepage, or leaks. The ancillary equipment section of the checklist included a list to record observations of the product pumps, couplings, piping, filling flanges, valves, valve covers, liquid level monitors, instrumentation, and leaks. The containment area section of the checklist included a list to record observations of the structural integrity of the containment; evidence of cracks, leaks, spills, or staining; the condition of the sump structure, piping, flanges, and valves; the presence of accumulated rainwater; and the general housekeeping of the area.

Inspections of the hazardous waste central accumulation areas (CAAs) at the 20-series, 30-series and 40-series bulk storage unloading pads, the lower drum shed pad, and the multiple bay bulk outbound shipment pad were recorded on a two-part checklist for observations related to the containers and the containment area. The container section of the checklist included a list to record if the covers/tarps were in place with no holes; if the containers were in good condition, not leaking, stored properly, kept closed, and labeled (including start date and waste codes); if containers were not stacked over two high and arranged with adequate aisle space; and if containers were stored for less than 90 days. The containment area section of the checklist included a list to record observations of the condition of the containment area; evidence of gaps and cracks in the containment; the condition of the coating on the containment area; evidence of

spills or staining; the presence of accumulated rainwater; and the general housekeeping of the area.

Inspections of the drum receiving area in SA-6 were recorded on a three-part checklist for observations related to the container storage area, the container, and the containment area. The container storage area section of the checklist included a list to record observations of the floor and evidence of cracks, staining, or leaks. The container section of the checklist included a list to record the integrity of the containers; if containers were labeled and sealed; and if containers were not stacked over two high and arranged with adequate aisle space. The containment area section of the checklist included a list to record observations of the structural integrity of the containment area; evidence of cracks, leaks, spills, or staining; the presence of accumulated rainwater; and the general housekeeping of the area.

Subpart CC inspections of SA-5 and SA-6 were recorded on a four part-checklist for observations related to Level 1 DOT containers with specification marking, Level 1 non-DOT containers, Level 2 DOT containers, and Level 2 non-DOT containers. The Level 1 DOT containers with specification marking section included a list to record observations related to potential cracks, gaps, or holes in the container and whether the container is securely closed. The Level 1 non-DOT container section included a list to record observations related to the presence of a cover with a continuous barrier; potential cracks, gaps or holes in the container; and whether the container is securely closed. The Level 2 DOT container section of the checklist included a list to record observations related to potential cracks, gaps or holes in the container and whether the container is securely closed. The Level 2 non-DOT container section of the checklist included a list to record observations related to whether the container operates with no detectable emissions; potential cracks, gaps or holes in the container; and whether the container is securely closed.

Inspections of the drum processing area in SA-5 were recorded in a nine-part checklist for observations related to the loading/unloading area, container storage area, containers, disperser tanks, ancillary equipment for disperser tanks, compactors, fire suppression system, ventilation system, and containment area. The loading/unloading section included a list to record evidence of cracks, spills, or staining; the presence of accumulated rainwater; and the condition of the sump. The container section included a list to record the integrity of the containers; if containers were labeled and sealed; and if containers were not stacked over two high and arranged with adequate aisle space. The disperser tank section included a list to record observations of the external condition and structural integrity of the tanks; evidence of tank discoloration; presence of covers and signage; and evidence of seepage or leaks. The ancillary equipment for disperser tank section included a list to record observations related to the pumps, couplings, piping, flanges, valves, valve covers, liquid level monitors, and electrical instrumentation, and evidence of leaks. The compactor section included a list to record observations of the structural integrity of the units; the condition of the hydraulic system and electrical instrumentation; and evidence of leakage. The fire suppression system section included a list to record observations related to the pull stations and water supply. The ventilation system included a list to record observations related to the fans and electrical instrumentation. The containment area section included a list to record observations of the structural integrity of the containment area; evidence of cracks, leaks, spills, or staining; the condition of the sump structure, piping, fitting flanges, and valves; and the presence of accumulated rainwater.

During the inspection, the inspectors observed significant deterioration in the secondary containment area of SA-2, and personnel stated that the area is scheduled for repair. Although the records of inspections conducted by Nova personnel indicated that the secondary containment was in need of repair, the records of inspections conducted by GRR personnel did not identify any deficiencies with the condition of the secondary containment area in SA-2.

> **Pursuant to HW Permit SCD036275626, Section II.D.–General Inspection Requirements, the Permittee shall follow the general inspection requirements set out in R.61-79.264.15 [40 C.F.R. § 264.15] and Section F of the Approved Permit Application. Section F-2a–General Inspection Requirements and R.61-79.264.15(d) [40 C.F.R. § 264.15(d)] state that the information to be included on the inspection log sheet is the inspector's name, the time and date of the inspection, the items to be inspected, deficiencies encountered, the status of each item, and any observations that may be pertinent to the overall condition of the inspected item.**

> **Pursuant to HW Permit SCD036275626, Section II.D.–General Inspection Requirements, the Permittee shall follow the general inspection requirements set out in R.61-79.264.15 [40 C.F.R. § 264.15] and Section F of the Approved Permit Application. Section F-2c–Remedial Action (Page F-7) states that, if a detected deficiency cannot be corrected immediately, the following actions will be taken: (b) establish the corrective action to be taken and describe on the inspection log; (c) assign the corrective action to a specific person and note the person's name on the log or include a work order number; (d) establish an appropriate time period for the corrective action to be completed considering the nature of the deficiency; and (e) follow up on the assigned date for completion, not that repairs have been completed on the inspection form.**

Daily inspections conducted by Mr. John Daughrity on 10/01/2020, 10/02/2020, 10/12/2020, 10/03/2020, and 10/14/2020 appeared to be copies of a completed inspection checklist with identical checkmarks. Daily inspection checklists were missing or incomplete for the following dates: 12/05/2020, 12/06/2020, 12/12/2020, 12/13/2020, and 12/19/2020 through 12/27/2020.

> **Pursuant to HW Permit SCD036275626, Section II.D.–General Inspection Requirements, the Permittee shall follow the general inspection requirements set out in R.61-79.264.15 [40 C.F.R. § 264.15] and Section F of the Approved Permit Application. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by R.61-79.264.15(c) [40 C.F.R. § 264.15(c)] and the Permit application.**

Weekly Inspection Records: GRR personnel provided records of weekly inspections of the security system, communication equipment, safety and emergency equipment, spill control equipment, decontamination equipment, PPE, fire suppression equipment, boiler room, and containment pond conducted since 2018. The inspectors reviewed the records of weekly inspections between 01/01/2019 and 06/30/2019. The security system section of the checklist included a place to record observations for the remote-control gates, manual gates, fence and warning signs. The communication equipment section included a place to record observations for

the hand-held radios and public address system. The safety and emergency equipment section included a place to record observations for the emergency alarm, water supply, eyewash stations, emergency showers, and first aid supplies. The spill control equipment section included a place to record observations for oil absorbent pillows, oil absorbent granules, shovels, portable transfer pumps, tank trucks, and backhoes. The decontamination equipment section included a place to record observations for detergent, scrub brushes, steam wand, buckets, and rags. The PPE section included a place to record observations for Tyvek coveralls, safety glasses, face shields, hard hats, gloves, air packs, and respirators. The fire suppression equipment section included a place to record observations for the water tank level, high pressure water distribution system, fire hydrants, diesel water pump, fire extinguishers, wheel unit fire extinguisher, hose stations, and hose racks. The boiler room section included a place to record observations for the fuel leaks, floor staining, and odors. The containment pond section included a place to record observations of liquid discoloration. Finally, the checklist included a section for general housekeeping.

Subpart BB Monitoring Records: The inspectors reviewed records of Subpart BB air monitoring events conducted for GRR and for Nova over the previous three years. GRR's records indicate that GRR pumps are monitored once per month, and valves are monitored quarterly. With the exception of one recorded background value, GRR's records did not include the time of each air monitoring event, the instrument reading for each monitoring point, or the background reading for each monitoring event. Nova's records indicate that Nova's distillation pumps are inspected weekly and monitored once per month. Nova's records did not include the time of each monitoring event or the instrument reading for each monitoring point. Nova's records also did not include the name or signature of the person conducting the air monitoring on 01/15/2021.

> **Pursuant to HW Permit SCD036275626, Section I.E.9(c), which incorporates R.61-270.30(j)(3) [40 C.F.R. § 270.30(j)(3)], records of monitoring information shall specify the dates, exact place, and times of sampling or measurements; the individuals who performed the sampling or measurements; the dates analyses were performed; the individuals who performed the analyses; the analytical techniques or methods used; and the results of such analyses.**

According to GRR's records on 11/17/2020, a reading of greater than 5,000 ppm was detected at a hole in the coupling weld of a 2" roof plug on Tank 1734B; a reading of 2,100 ppm was detected at a poor gasket seal on a 20" emergency vent seal on Tank 1734B; a reading of 838 ppm was noted at a gasket failure on a 24" manway flange on Tank 1736A; a reading of 5,500 ppm was noted at a poor gasket seal on a 20" emergency vent on Tank 1736A; and a reading of 718 ppm was noted at a poor gasket seal on a 20" emergency vent on Tank 1736B. According to GRR's records on 11/18/2020, the monitoring records noted that liquid residue on the top of the Hydropulper roof made PID measurement collection infeasible. The records did not include documentation of repair for any of these observations.

> **Pursuant to HW Permit SCD036275626, Section IX.B. – Emission Control Technology, which incorporates R.61-79.264.1054(a) [40 C.F.R. § 264.1054(a)], except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in R.61-79.264.1063(c) [40 C.F.R. § 264.1063(c)].**

Pursuant to HW Permit SCD036275626, Section IX.B.–Emission Control Technology, which incorporates R.61-79.264.1054(b) [40 C.F.R. § 264.1054(b)], after each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in R.61-79.264.1059 [40 C.F.R. § 264.1059].

Tank Integrity Records: The inspectors reviewed records of tank thickness measurements conducted during calendar year 2020, which were conducted on Tanks 1734B, 1735A, 1735B, 1736A, 1736B, 1741, 1742, 1743, 1746, 1747, BP-1, BP-2, BP-3, and BP-4. The inspectors also reviewed records of internal visual inspections conducted during calendar year 2020 for tanks 1734B, 1735A, 1735B, 1736A, 1736B, 1741, 1742, 1743, 1746, 1747, BP-1, BP-2, BP-3, and BP-4.

Subpart CC Records: The inspectors reviewed Resolve Environmental Engineering's Subpart CC and LDAR report for GRR's Tank 1734A, the Hydropulper and vapor line, dated 07/07/2020, and Nova's records of Subpart CC visual inspections conducted on 12/04/2020 for Tanks 107, 207, 208, 211 and 212, and on 12/16/2019 for Tanks 107, 207, 208 and 211.

12) Closing Conference

An exit meeting was conducted at on 05/05/2021 with the following individuals:

Steve Bargeron, GRR	Lane Smith, Giant Cement
Timothy Boyd, GRR	Laurie Benton DiGaetano, EPA
Raheem Lloyd, Nova	Tom Richmond, SCDHEC
Brandon Ardis, Nova	Earle Watson, SCDHEC

and on 06/24/2021 with the following individuals:

Janice Timpson, GRR	Adrianne Holt, GRR
Timothy Boyd, GRR	Tom Richmond, SCDHEC
Laurie Benton DiGaetano, EPA	Earle Watson, SCDHEC
Parvez Mallick, EPA	Jeff Herbig, SCDHEC
David Champagne, EPA	Barbara Dankmyer, SCDHEC.

During the meeting on 05/05/2021, the inspectors discussed their preliminary observations from the inspection. During the meeting on 06/24/2021, the inspectors and permit writers discussed their preliminary observations from the follow-up visit.

15) Signed

LAURIE DIGAETANO Digitally signed by LAURIE DIGAETANO Date: 2021.09.08 10:43:14 -04'00'

Laurie Benton DiGaetano Date

Senior Enforcement and Compliance Specialist

Concurrence

ARACELI CHAVEZ

Digitally signed by ARACELI CHAVEZ
Date: 2021.09.08 11:55:34 -04'00'

Araceli B. Chavez — Date

Chief
RCRA Enforcement and Compliance Section

Photo 1: 55-gallon drum in SA-6. The drum, which was labeled D001 hazardous waste aerosol can cylinders and marked with an accumulation start date of 04/11/2021, had a small hole in the lid.

Photo 2: 55-gallon drum in SA-6. The drum, which was labeled as D005 / D006 / D007 / D008 hazardous waste paint filters, was missing a bung.

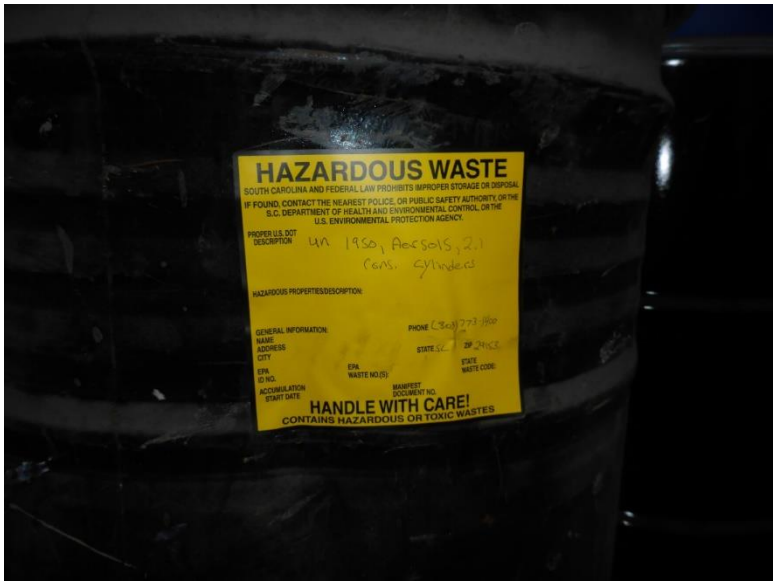

Photo 3: 55-gallon drum in SA-6. Drum labeled hazardous waste flammable aerosol can / cylinder, but not labeled with generator information, EPA waste codes, or an accumulation start date.

Photo 4: Supersack in SA-6, which was marked with the identification number 21-4-22-25, was not labeled with the words hazardous waste.

Photo 5: Drum in SA-6 with the hazardous waste label scratched off.

Photo 6: One 55-gallon drum in a CAA within SA-6. The drum is used to accumulate and store hazardous waste that is generated at the laboratories. It was equipped with a funnel, labeled as hazardous waste flammable liquid (acetone, xylene), and dated 04/23/2021.

Photo 7: Four 55-gallon drums of F005 / F003 / F004 / F001 / F002 / D001 / D006 / D005 hazardous waste solid (xylene / toluene) in SA-5. Each of the containers was identified with a Class 9 DOT hazard placard. One drum had a portion of a flammable hazard placard, which was part of a previous product label which had been torn off, but none of the containers were clearly identified with an indication that the contents are flammable or toxic.

Photo 8: One tote of hazardous waste stacked above other waste containers in SA-5. No hazardous waste label was observed on the tote, which was marked with the tracking number 21-2-16-30. The top of the tote had been cut, leaving the container open and in poor condition. The container label, which had fallen inside the tote, indicated that the tote contained D001 / D035 / F003 / F005 hazardous waste flammable liquid (toluene / MEK).

Photo 9: Leaking 55-gallon drum in SA-5. Drum was marked with a flammable liquid DOT hazard placard and appeared to be labeled as hazardous waste. The hazardous waste label could not be read, because it was facing away from the aisle and obscured by other containers.

Photo 10: Hazardous waste label observed on one of five 40-yard roll-off containers in the CAA.

Photo 11: Example of one 55-gallon drum observed inside a tractor trailer at the roll-off container CAA.

Photo 12: First tractor trailer located at the roll-off container CAA. The trailer is full of 55-gallon drums, which were full of hazardous waste generated off-site and received by the facility for treatment, storage and / or disposal.

Photo 13: Second tractor trailer located at the roll-off container CAA. The trailer is full of 55-gallon drums, which were full of hazardous waste generated off-site and received by the facility for treatment, storage and / or disposal.

Photo 14: Third tractor trailer located at the roll-off container CAA. The trailer is full of 55-gallon drums, which were full of hazardous waste generated off-site and received by the facility for treatment, storage and / or disposal.

Photo 15: Three illegible tags on top of a filter house associated with the BP tank farm in SA-7.

Photo 16: Illegible tag located between a filter and pump associated with the BP tank farm in SA-7.

Photo 17: Significant cracks, peeled and missing coating in the secondary containment of SA-2.

Photo 18: Tags associated with Tank 1736B which were not legible.

Photo 19: Peeling label on permitted hazardous waste storage Tank 1741.

Photo 20: Open ended line at the cam-lock fitting that was identified with tag number 572.

Photo 21: Liquid at the connection identified with tag number 583.

Photo 22: Liquid at the connection identified with tag number 583.

Photo 23: Missing bolt on a connection of ancillary equipment associated with the distillation system at T9-A.

Photo 24: Missing bolt on a connection of ancillary equipment associated with the distillation system at T9-A.

Photo 25: No tags on equipment associated with the distillation process.

Photo 26: Severe corrosion on tags and ancillary equipment associated with Tank 212. Corrosion caused the tags to be illegible.

Photo 27: Eight 55-gallon drums in the CAA located next to the SA-2 storage pad.