



Tennessee Operations
Aerospace and Automotive Products
2300 North Wright Road
Alcoa, TN 37701-3141 USA

SUBMITTED ELECTRONICALLY

December 28, 2022

Tennessee Dept. of Environment & Conservation
Division of Water Resources
Enforcement and Compliance Section
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, TN 37243

RE: Application for a State Operation Permit (SOP) RENEWAL: Arconic US, LLC

Ms. McClellan:

Please accept the attached Application for a State Operation Permit (SOP) renewal on behalf of Arconic US, LLC (Arconic). The submittal is for that facility located at 300 North Hall Road (SOP-98026), which pertains to a pump and haul system in place for multiple sewage holding tanks located throughout the facility. The holding tanks are to be discharged to the City of Maryville wastewater treatment plant via two (2) manhole inlets maintained on Arconic property. The original permit identified a single manhole discharge point which flows to the Edison Street meter at lat/lon: 35.778474, -83.972454. Due to sanitary line repairs that are required, a second discharge location was requested and confirmed by TDEC in an email dated April 16, 2021. The additional manhole area is located at lat/lon: 35.778265, -83.974374 and flows to the Hall Road meter. Both discharge points will be used concurrently as the pump and haul operator deems necessary.

If you have any questions concerning this correspondence, please contact Ryan Hennessey at (865) 977-2403 or Ryan.Hennessey@arconic.com

Sincerely,

Ryan Hennessey
Environmental Engineer
Arconic US LLC



Tennessee Department of Environment and Conservation
 Division of Water Resources
 William R. Snodgrass - Tennessee Tower
 312 Rosa L. Parks Avenue, 11th Floor
 Nashville, Tennessee 37243-1102
 (615) 532-0625

APPLICATION FOR A STATE OPERATION PERMIT (SOP)

Type of application: New Permit Permit Reissuance Permit Modification

Permittee Identification: (Name of city, town, industry, corporation, individual, etc., applying, according to the provisions of Tennessee Code Annotated Section 69-3-108 and Regulations of the Tennessee Water Quality Control Board.)

Permittee Name: ARCONIC US, LLC - SOUTH PLANT (applicant):

Permittee Address: 300 NORTH HALL ROAD, ALCOA, TN 37701

Official Contact: JEFFREY C. WEIDA	Title or Position: LOCATION MANAGER		
Mailing Address: 2300 N. WRIGHT ROAD	City: ALCOA	State: TN	Zip: 37701
Phone number(s): 865-977-2502	E-mail: JEFFREY.WEIDA@ARCONIC.COM		

Optional Contact: RYAN HENNESSEY	Title or Position: ENVIRONMENTAL ENGINEER		
Address: 2300 N. WRIGHT ROAD	City: ALCOA	State: TN	Zip: 37701
Phone number(s): 865-977-2403	E-mail: RYAN.HENNESSEY@ARCONIC.COM		

Application Certification (must be signed in accordance with the requirements of Rule 0400-40-05-.05)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Name and title; print or type JEFFREY C. WEIDA	Signature 	Date 12/29/2022
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Facility Identification:			Existing Permit No.
Facility Name: ARCONIC US, LLC - SOUTH PLANT			County: BLOUNT
Facility Address or Location: 300 NORTH HALL ROAD, ALCOA, TN 37701			Latitude: 35.77423, Longitude: -83.97424
Name and distance to nearest receiving waters: PISTOL CREEK, APPROXIMATELY 0.651 MILE NORTHEAST			
If any other State or Federal Water/Wastewater Permits have been obtained for this site, list their permit numbers: NPDES PERMIT #TN0065081			
Name of company or governmental entity that will operate the permitted system: ARCONIC US, LLC			
Operator address: 300 NORTH HALL ROAD			
Has the owner/operator filed for a Certificate of Convenience & Necessity (CCN), or an amended CCN, with the Tennessee Regulatory Authority (TRA) (may be required for collection systems and land application treatment systems)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
If the applicant listed above does not yet own the facility/site or if the applicant will not be the operator, explain how and when the ownership will be transferred or describe the contractual arrangement and renewal terms of the contract for operations. NOT APPLICABLE			
Complete the following information explaining the entity type, number of design units, and daily design wastewater flow:			
<u>Entity Type</u>	<u>Number of Design Units</u>		<u>Flow (gpd)</u>
<input type="checkbox"/> City, town or county	No. of connections:		
<input type="checkbox"/> Subdivision	No. of homes:	Avg. No. bedrooms per home:	
<input type="checkbox"/> School	No. of students:	Size of cafeteria(s): No. of showers:	
<input type="checkbox"/> Apartment	No. of units:	No. units with Washer/Dryer hookups: No. units without W/D hookups:	
<input type="checkbox"/> Commercial Business	No. of employees:	Type of business:	
<input checked="" type="checkbox"/> Industry	No. of employees: 259	Product(s) manufactured: ALUMINUM INGOTS	500
<input type="checkbox"/> Resort	No. of units:		
<input type="checkbox"/> Camp	No. of hookups:		
<input type="checkbox"/> RV Park	No. of hookups:	No. of dump stations:	
<input type="checkbox"/> Car Wash	No. of bays:		
<input type="checkbox"/> Other			
Describe the type and frequency of activities that result in wastewater generation. FIVE BUILDINGS LOCATED ON THE SOUTH PLANT PROPERTY HAVE SANITARY SEWAGE HOLDING TANKS THAT ARE PUMPED AND HAULED TO A DESIGNATED SANITARY SEWAGE MANHOLE. ALSO INCLUDES MISCELLANEOUS SANITARY SEWAGE COLLECTED AT BOTH NORTH/SOUTH PLANTS DURING SANITRY LINE CLEANING AND REPAIRS ON AN AS NEEDED BASIS. SEE ATTACHED SHEET FOR ADDITIONAL INFORMATION.			

Engineering Report (required for collection systems and/or land application treatment systems):	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Prepared in accordance with Rule 0400-40-05-.03 and Section 1.2 of the State of Tennessee Design Criteria for Sewage Works	
<input type="checkbox"/> Attached, or	
<input type="checkbox"/> Previously submitted and entitled:	Approved? <input type="checkbox"/> Yes. Date: <input type="checkbox"/> No
Operation and Maintenance Inspection Schedule Submitted:	Approved? <input type="checkbox"/> Yes. Date: <input type="checkbox"/> No

Wastewater Collection System:	<input checked="" type="checkbox"/> N/A	
System type (i.e., gravity, low pressure, vacuum, combination, etc.):		
System Description:		
Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.):		
In the event of a system failure describe means of operator notification:		
List the emergency contact(s) (name/phone):		
For low-pressure systems, who is responsible for maintenance of STEP/STEG tanks and pumps or grinder pumps (list all contact information)?		
Approximate length of sewer (excluding private service lateral):		
Number/hp of lift stations:	/ Number/hp of lift pumps /	
Number/volume of low pressure and or grinder pump tanks	/	
Number/volume septic tanks	/	
Attach a schematic of the collection system. <input type="checkbox"/> Attached		
If this is a satellite sewer and you are tying in to another sewer system complete the following section, listing tie-in points to the sewer system and their location (attach additional sheets as necessary):		
<u>Tie-in Point</u>	<u>Latitude (xx.xxxx°)</u>	<u>Longitude (xx.xxxx°)</u>

Land Application Treatment System:	<input checked="" type="checkbox"/> N/A
Type of Land Application Treatment System: <input type="checkbox"/> Drip <input type="checkbox"/> Spray <input type="checkbox"/> Other, explain:	
Type of treatment facility preceding land application (recirculating media filters, lagoons, other, etc.):	
Attach a treatment schematic. <input type="checkbox"/> Attached	
Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.):	
For New or Modified Projects: Name of Developer for the project:	
Developer address and phone number:	
For land application, list: Proposed acreage involved: Inches/week gpd/sq.ft loading rate to be applied:	
Is wastewater disinfection proposed?	
<input type="checkbox"/> Yes Describe land application area access:	
<input type="checkbox"/> No Describe how access to the land application area will be restricted:	
Attach required additional Engineering Report Information (see website for more information)	
<input type="checkbox"/> Topographic map (1:24,000 scale presented at a six inch by six inch minimum size) showing the location of the project including quadrangle(s) name(s) GPS coordinates, and latitude and longitude in decimal degrees should also be included.	
<input type="checkbox"/> Scaled layout of facility showing the following: lots, buildings, etc. being served, the wastewater collection system routes, the pretreatment system location, the proposed land application area(s), roads, property boundaries, and sensitive areas such as streams, lakes, springs, wells, wellhead protection areas, sinkholes and wetlands.	
<input type="checkbox"/> Soils information for the proposed land disposal area in the form of a Water Resources Soils Map per Chapter 16 and 17 State of Tennessee Design Criteria for Sewage Work. The soils information should include soil depth (borings to a minimum of 4 feet or refusal) and soil profile description for each soil mapped.	
<input type="checkbox"/> Topographic map of the area where the wastewater is to be land applied with no greater than ten foot contours presented at a minimum size of 24 inches by 24 inches.	
<input type="checkbox"/> Describe alternative application methods based on the following priority rating: (1) connection to a municipal/public sewer system, (2) connection to a conventional subsurface disposal system as regulated by the Division of Groundwater Protection, and/or (3) land application.	

<p>For Drip Dispersal Systems Only: Unless otherwise determined by the Department, sewage treatment effluent wells, i.e, large capacity treatment/drip dispersal systems after approval of the SOP Application, will be issued an UIC tracking number and will be authorized as Permit by Rule per UIC Rule 0400-45-06-.14(2) and upon issue of a State Operating Permit and Sewage System Construction Approval by the Department. Describe the following:</p>	<input checked="" type="checkbox"/> N/A
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The area of review (AOR) for each Drip Dispersal System shall, unless otherwise specified by the Department, consist of the area lying within a one mile radius or an area defined by using calculations under 0400-45-06-.09 of the Drip Dispersal System site or facility, and shall include, but not be limited to general surface geographic features, general subsurface geology, and general demographic and cultural features within the area. Attach to this part of the application a general characterization of the AOR, including the following: (This can be in narrative form)

- A general description of all past and present groundwater uses as well as the general groundwater flow direction and general water quality.
- A general description of the population and cultural development within the AOR (i.e. agricultural, commercial, residential or mixed)
- Nature of injected fluid to include physical, chemical, biological or radiological characteristics.
- If groundwater is used for drinking water within the area of review, then identify and locate on a topographic map all groundwater withdrawal points within the AOR, which supply public or private drinking water systems. Or supply map showing general location of publicly supplied water for the area (this can be obtained from the water provider)
- If the proposed system is located within a wellhead protection area or source water protection area designated by Rule 0400-45-01-.34, show the boundary of the protection area on the facility site plan.
- Description of system, Volume of injected fluid in gallons per day based upon design flow, including any monitoring wells
- Nature and type of system, including installed dimensions of wells and construction materials

Pump and Haul:	<input type="checkbox"/> N/A
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Reason system cannot be served by public sewer: LOCATION OF BLDGS DO NOT ALLOW FOR SANITARY SEWER CONNECTIONS

Distance to the nearest manhole where public sewer service is available: VARIABLE

When sewer service will be available: NA

Volume of holding tank: gal. MULTIPLE TANKS (SEE ATTACHED SHEET)

Tennessee licensed septage hauler (attach copy of agreement): 87970H1 (OWNED AND OPERATED BY ARCONIC US, LLC)

Facility accepting the septage (attach copy of acceptance letter): NA

Latitude and Longitude (in decimal degrees) of approved manhole for discharge of septage: 35.77854399, -83.97244962

Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.):

SEWAGE HOLDING TANKS ARE INSPECTED FREQUENTLY AND PUMPED REGULARLY. SYSTEM IS GRAVITY DRAINED WITH LIMITED POWERED EQUIPMENT. NO STOMSEWERS DRAIN TO SEWAGE HOLDING TANKS

Holding Ponds (for non-domestic wastewater only):		<input checked="" type="checkbox"/> N/A
Pond use: <input type="checkbox"/> Recirculation <input type="checkbox"/> Sedimentation <input type="checkbox"/> Cooling <input type="checkbox"/> Other (describe):		
Describe pond use and operation:		
If the pond(s) are existing pond(s), what was the previous use?		
Have you prepared a plan to dispose of rainfall in excess of evaporation? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, describe disposal plan:		
Is the pond ever dewatered? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, describe the purpose for dewatering and procedures for disposal of wastewater and/or sludge:		
Is(are) the pond(s) aerated? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Volume of pond(s): _____ gal. Dimensions: _____		
Is the pond lined (Note if this is a new pond system it must be lined for SOP coverage. Otherwise, you must apply for an Underground Injection Control permit.)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Describe the liner material (if soil liner is used give the compaction specifications):		
Is there an emergency overflow structure? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<i>If so, provide a design drawing of structure.</i>		
Are monitoring wells or lysimeters installed near or around the pond(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<i>If so, provide location information and describe monitoring protocols (attach additional sheets as necessary):</i>		

**Waste Flow Description of Pump and Haul Holding Tanks
Arconic Inc, South Plant
SOP 98-026**

Pump and Haul Site #1

Location: Southeast Corner of Bldg 81 (South Ingot)
Type of Wastewater: Sanitary Sewage
Characteristics: BOD5, solids, ammonia, pH
Toxic Substance Present: No
Flow / Size of Holding Tank: 82 Gals/day --- 1500 Gal Tank

Pump and Haul Site #2

Location: Northeast Corner of Bldg 81 (South Ingot)
Type of Wastewater: Sanitary Sewage
Characteristics: BOD5, solids, ammonia, pH
Toxic Substance Present: No
Flow / Size of Holding Tank: 48 Gals/day --- 1500 Gal Tank

Pump and Haul Site #3

Location: Building 150 (Marinite/Carpenter Shops)
Type of Wastewater: Sanitary Sewage
Characteristics: BOD5, solids, ammonia, pH
Toxic Substance Present: No
Flow / Size of Holding Tank: 100 Gals/day --- 2000 Gal Tank

Pump and Haul Site #4

Location: Northside of Building 88 (Moisture Tech Building)
Type of Wastewater: Sanitary Sewage
Characteristics: BOD5, solids, ammonia, pH
Toxic Substance Present: No
Flow / Size of Holding Tank: 5 Gals/day --- 1500 Gal Tank

Pump and Haul Site #5

Location: Eastside of Building 82 (Septic tank @ ATRR)
Type of Wastewater: Sanitary Sewage
Characteristics: BOD5, solids, ammonia, pH
Toxic Substance Present: No
Flow / Size of Holding Tank: 200 Gals/day --- 1500 Gal Tank

Note: In addition to the above sources, small volumes of sanitary sewage waters generated from North Plant/South Plant during sanitary line cleaning and repairs would also be discharged with the above at the designated on-site manhole as referenced in the attached application and recorded on monthly Septage Transport Logs on an as needed basis.

ARCONIC SOUTH PLANT MANHOLE LOCATIONS (SOP-98026)



New permitted location to add @ 35.778265, -83.974374, flows to Hall Rd meter

Permitted location @ 35.778474, -83.972454, flows to Edison Street meter



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

Water-Based Systems
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243-1102

PERMIT CONTACT INFORMATION

Please complete all sections. If one person serves multiple functions, please repeat this information in each section.

PERMIT NUMBER: _____ DATE: _____

PERMITTED FACILITY: _____ COUNTY: _____

OFFICIAL PERMIT CONTACT:

(The permit signatory authority, e.g. responsible corporate officer, principle executive officer or ranking elected official)

Official Contact:	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

PERMIT BILLING ADDRESS (where invoices should be sent):

Billing Contact:	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

FACILITY LOCATION (actual location of permit site and local contact for site activity):

Facility Location Contact:	Title or Position:		
Facility Location (physical street address):	City:	State:	Zip:
Phone number(s):	E-mail:		

Alternate Contact (if desired):	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

FACILITY REPORTING (Discharge Monitoring Report (DMR) or other reporting):

Cognizant Official authorized for permit reporting:	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		
Fax number for reporting:	Does the facility have interest in starting electronic DMR reporting? Yes No		