

# Fact Sheet



## For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-03900675-2017**  
Application Received: **February 3, 2016**  
Plant Identification Number: **03900675**  
Permittee: **Recovery Solutions & Technologies, Inc.**  
Facility Name: **Institute Plant**  
Mailing Address: **P.O. Box 2392 Charleston WV 25328**

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Physical Location: Institute, Kanawha County, West Virginia  
UTM Coordinates: 432.189 km Easting • 4,248.754 km Northing • Zone 17  
Directions: From I-64, take the Institute exit, turn right onto State Route 25. Plant is located about ½ mile west on Route 25.

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### Facility Description

The Glycol Recovery Plant processes byproduct ethylene glycol and propylene glycol to remove water and other light boilers and then refines the ethylene glycol and propylene glycol into a final product. Water and other light boilers, including methanol, are separated for reprocessing or sent to the wastewater treatment unit. The final ethylene glycol and propylene glycol product is stored in unit tanks prior to shipment.

### Emissions Summary

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Glycol Recovery Plant Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	< 0.01	< 0.01
Nitrogen Oxides (NO <sub>x</sub> )	< 0.01	< 0.01
Particulate Matter (PM <sub>2.5</sub> )	< 0.01	< 0.01
Particulate Matter (PM <sub>10</sub> )	< 0.01	< 0.01

<b>Glycol Recovery Plant Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2015 Actual Emissions</b>
Total Particulate Matter (TSP)	< 0.01	< 0.01
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	37.59	6.17

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2015 Actual Emissions</b>
Ethylene Glycol	30.0	2.60
Total HAPs	33.72	5.63

*Some of the above HAPs may be counted as PM or VOCs.*

### **Title V Program Applicability Basis**

Due to the facility-wide potential to emit over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Recovery Solutions & Technologies Inc.'s Institute Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for minor sources.
	45CSR16	Standards of Performance for New Stationary Sources
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants.
	40 C.F.R. 60, Subpart NNN	Standards of Performance for VOC Emissions from SOCM Distillation Operations
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63, Subparts F, G, H	Hazardous Organic NESHAP (HON)
40 C.F.R. Part 82, Subpart F	Ozone depleting substances	
State Only:	45CSR4	No objectionable odors.
	45CSR§§21-37 and 40	Control of VOC Emissions
	45CSR27	Best Available Technology (BAT) for HAPs

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-1215	April 24, 1990	
R13-1127	June 26, 1989	
CO-R21-97-41	October 20, 1997	June 14, 2006 letter from J. L. Blatt
CO-R27-99-14-A(92)	March 31, 1999	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

### Determinations and Justifications

The facility name has been changed from "Institute Plant" to "Institute Facility".

The UTM Coordinates have been corrected.

Section 5.0 has been moved to Section 4.0.

A GR-07 – Regular Grade Forecolumn Overhead Stream has been determined to be a Group 2 Process Wastewater Stream. This stream has been added to Conditions 4.1.7 and 4.4.5.

Tank 1416 (T1416) has been removed from service. This tank has been removed from Section 1.1 Emission Units Table, Condition 4.1.5, and 4.4.3.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

**a. 40CFR64 Compliance Assurance Monitoring (CAM)**

There has not been the addition of any pollutant-specific emission units that have potential pre-control device emissions of a regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

### Request for Variances or Alternatives

None.

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Beginning Date: December 5, 2016  
Ending Date: January 4, 2017

### **Point of Contact**

All written comments should be addressed to the following individual and office:

Mike Egnor  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478  
michael.egnor@wv.gov

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Response to Comments (Statement of Basis)**

On January 17, 2017 Recovery Solutions & Technologies Inc. purchased the Glycol Process from Union Carbide Corporation. The permit ID, company name, mailing address, Title V applicability, and phone number have been updated to reflect the new owner. The facility name has been changed back from "Institute Facility" to "Institute Plant"