CHEMICAL COMPLIANCE

HON RTR

Trinity Consultants is a leading global environmental consulting firm that brings 50 years of experience providing services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Trinity has the technical expertise, industry depth, and specialized capabilities to help clients achieve their goals across the natural and built environments.

Trinity Consultants has a reputation for excellence in providing a broad range of air quality and environmental services for the Chemical Industry, partnering with clients nation-wide to develop and maintain effective compliance programs under the National Emission Standards for Hazardous Air Pollutants (NESHAP) standards codified in 40 CFR 63, including the standards for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) under Subparts F, G and H (HON). In 2020, U.S. EPA updated the HON under their Residual Risk and Technology Review (RTR) requirements, applying several new requirements. Trinity is strongly positioned to assist facilities to implement and comply with these new requirements.

Process Vents, Surge Control Vessels, and Bottoms Receivers

The HON RTR introduced significant changes to the regulation of process vents, surge control vessels (SCVs), and bottoms receivers (BRs). Facilities can no longer rely on Total Resource Effectiveness (TRE) determinations to avoid controls. Any process vent emitting 1 lb/hr or more of a hazardous air pollutant (HAP) must now be controlled. Additionally, SCVs and BRs can no longer be treated as storage tanks for regulatory purposes. They must be evaluated and controlled under the process vent provisions. Trinity assists clients with reclassifying equipment, quantifying emissions under the revised thresholds, and selecting appropriate control technologies. Our team can help streamline compliance through engineering evaluations and robust control strategies tailored to meet these newly enforceable standards.

New Work Practice Standards and Prohibitions

The 2020 HON RTR rule also introduced critical new work practice standards and prohibited practices aimed at reducing emissions during routine and non-routine operations. Facilities are now subject to restrictions on maintenance venting, tank degassing, and must comply with new pressure relief device (PRD) control and monitoring standards. Bypass provisions have been redefined, with an emphasis on ensuring continuous control and preventing unmonitored releases. Furthermore, the Startup, Shutdown, and Malfunction (SSM) exemption has been formally revoked, requiring full compliance

during all modes of operation. Trinity offers expert guidance in adapting existing operating procedures to meet these expectations, developing bypass management plans, and implementing PRD detection and response systems. We help ensure that operational flexibility is maintained without compromising compliance or environmental performance.

Storage Tank Changes

The HON RTR introduced a range of enhanced controls for storage tanks that store hazardous air pollutants (HAPs), with a particular focus on internal floating roof (IFR) tank standards. New requirements demand upgraded fittings, gasketed covers, and controls for continuous nitrogen purge or blanket gas systems to minimize emissions. Facilities must now strictly manage planned maintenance and bypass periods, documenting all events and implementing rigorous recordkeeping practices. With our in-depth knowledge of NESHAP and RTR frameworks, Trinity helps facilities conduct detailed compliance gap analyses, implement revised procedures, and optimize tank operations while meeting these stringent requirements. Our team offers expert guidance to streamline implementation, leverage existing compliance efforts, and minimize operational disruptions during the transition.

Fenceline Monitoring Requirements

Under the updated HON RTR provisions, facilities using, producing, or storing specific HAPs are now required to install and operate fenceline monitoring systems. These systems must meet new action level thresholds, include meteorological data integration, and follow strict protocols for root cause analysis and corrective actions when exceedances occur. Trinity brings proven expertise in deploying environmental monitoring programs, ensuring each facility meets technical and procedural obligations. Our consultants collaborate closely with site teams to evaluate current systems, identify design and

data gaps, and implement tailored solutions that stand up to regulatory scrutiny. We don't just check boxes—we deliver strategic, practical solutions that enhance compliance and operational transparency.

Technology Updates – Flare, HES, Reporting

HON facilities are now held to updated technology standards that reflect best practices in monitoring and control. Flares must meet stringent Refinery MACT requirements including minimum Net Heating Values (NHV), exit velocity limits, and visual emissions monitoring, all supported by Flare Management Plans (FMPs) and Continuous Parameter Monitoring Systems (CPMS). Heat Exchange Systems (HES) now require quarterly leak monitoring and prompt repairs, while all reporting must be electronically submitted via EPA's CEDRI/CDX platform. Trinity has helped dozens of facilities interpret and apply these complex requirements with precision. From plan development to system configuration and reporting automation, we ensure that your facility is equipped for efficient and enduring compliance with the updated HON rule.

Ethylene Oxide Provisions

The RTR has intensified regulatory focus on ethylene oxide (EtO), requiring facilities to conduct rigorous reviews of raw materials and process emissions. Even trace concentrations in vents must be tested, and wastewater streams with 1 ppmw or greater EtO are now classified as Group 1 and subject to control. Trinity's EtO compliance experts are uniquely positioned to support you in navigating these requirements. We provide comprehensive material reviews, sampling plan development, vent testing, and wastewater assessments to determine control applicability. With our hands-on experience in implementing MON and HON EtO requirements, we help facilities avoid pitfalls, minimize enforcement risk, and achieve seamless compliance outcomes.

Trinity Can Help

Whatever your challenge, Trinity has the experience and insights to provide intelligent solutions to help fill the gaps for compliance under the MON RTR rule. Our knowledge and expertise across a wide range of related issues make us an excellent partner for addressing the MON RTR requirements.

ISO 9001:2015 certified at our corporate office in Dallas, Texas

CONTACT OUR TEAM!

For more information about how we can help your organization, please contact us.

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