

| Legal Name | Facility City | Legal Name | Facility City |
|--------------------------|------------------|-----------------------------|---------------|
| AEROPRES CORPORATION | Hillsborough | KUEHNE CHEMICAL CO INC | South Kearny |
| AIR LIQUIDE AMERICA | South Plainfield | LABREA BAKERY | Swedesboro |
| AL & JOHN GLEN ROCK HAMS | West Caldwell | LINDE GAS NORTH AMERICA LLC | Alpha |
| AMERICAN SPRAYTECH LLC | North Branch | LOGAN GENERATING CO LP | Swedesboro |
| AVANTOR PERF.MATERIALS | Phillipsburg | LUBRIZOL ADVANCED MATS. | Pedricktown |
| BASF CORPORATION | Washington | MCLANE COMPANY INC | Carneys Point |
| BAYONNE PLANT HOLDING | Bayonne | MURALO COMPANY, INC. | Bayonne |
| BENJAMIN MOORE & CO. | Newark | NESTLE USA - BEVERAGE | Freehold |
| BRICK TOWNSHIP MUA | Brick | NEW JERSEY AMERICAN WATER | Short Hills |
| BRIDOR USA INC | Vineland | NEW JERSEY AMERICAN WATER | Somerset |
| CAPE MAY COUNTY MUA | Rio Grande | NEW JERSEY AMERICAN WATER | Neptune |
| CARDOLITE CORP | Newark | NEW JERSEY AMERICAN WATER | Colts Neck |
| CASA DI BERTACCHI CORP | Vineland | NEW JERSEY AMERICAN WATER | Delran |
| CHAMBERS COGENERATION | Carneys Point | NEWARK CITY OF NWDC | West Milford |
| CHURCH & DWIGHT CO INC | Lakewood | OCEAN SPRAY CRANBERRIES | Bordentown |
| COGEN TECH. LINDEN | Linden | OXY VINYL LP | Pedricktown |
| COIM USA INC | Paulsboro | PASSAIC VALLEY WATER COMM. | Totowa |
| COIM USA INC | West Deptford | PAULSBORO REFINING CO. | Paulsboro |
| CREST FOAM INDUSTRIES | Moonachie | PHILLIPS 66 COMPANY | Linden |
| CVC SPECIALTY CHEMICALS | Maple Shade | POLYONE CORPORATION | Pedricktown |
| DEAN EAST - GARELICK | Florence | PSEG FOSSIL LLC | Jersey City |
| DELTECH RESIN COMPANY | Newark | PSEG FOSSIL LLC | Hamilton |
| DIVERSIFIED CPC INTL INC | Sparta | PSEG | Linden |
| DOW CHEMICAL COMPANY | Pennsauken | READINGTON FARMS INC | Whitehouse |
| DUPONT | Linden | RECKITT BENCKISER INC | Belle Mead |
| DUPONT | Parlin | RINCHEM COMPANY INC | Raritan Twp |
| DUPONT | Deepwater | RUST-OLEUM CORPORATION | Somerset |
| ELAN INCORPORATED | Newark | SEABROOK BROTHERS & SONS | Seabrook |
| EQUISTAR CHEMICALS LP | Edison | SIEGFRIED (USA) INC | Pennsville |
| EXXONMOBIL EDISON | Edison | SOLVAY SOLEXIS INC | West Deptford |
| FALCON SAFETY PRODUCTS | Branchburg | SOUTH JERSEY TERMINAL LLC | Bridgeton |
| FARMLAND DAIRIES LLC | Wallington | STATE METAL INDUSTRIES INC | Camden |
| FERRO CORPORATION | Bridgeport | STEPAN CO | Fieldsboro |
| FISHER SCIENTIFIC CO LLC | Bridgewater | SUNOCO | Westville |
| FXI FOAMEX INNOVATIONS | East Rutherford | SUNOCO | Newark |
| GRASSO FOODS INC. | Woolwich Twp | TEKNI-PLEX INC | Branchburg |
| HERCULES INC | Parlin | TRENTON CITY OF | Trenton |
| HESS CORPORATION | Port Reading | TROPICANA PRODUCTS INC | Jersey City |
| IMTT BAYONNE | Bayonne | UNITED WATER NEW JERSEY | Haworth |
| INFINEUM USA LP | Linden | VEECO INSTRUMENTS INC | Somerset |
| IQE RF LLC | Somerset | VOLTAIX LLC | North Branch |
| JOHANNA FOODS INC | Flemington | VWR INTERNATIONAL LLC | Bridgeport |
| JOHNSON MATTHEY INC | West Deptford | W R GRACE & CO - CONN | Edison |
| JOINT BASE MCGUIRE DIX | McGuire AFB | WELCO ACETYLENE CORP | Newark |
| KINDER MORGAN | Carteret | WEST-WARD PHARMACEUTICALS | Eatontown |

Source: NJDEP, July 2012.

NJ Work Environment Council Fact Sheet

New Rule for *Inherently Safer Technology Review* by the New Jersey Department of Environmental Protection

Effective date: May 5, 2008

New Jersey is the only state in the nation with Inherently Safer Technology (IST) requirements. Federal Department of Homeland Security chemical security rules do not require IST.¹ Nor do EPA rules for prevention of accidental releases or OSHA's standard on *Process Safety Management*. **This rule can help protect the health and safety of workers and communities by encouraging the reduction of hazardous chemicals at facilities.**

What does *Inherently Safer Technology* (IST) mean in the rule?

IST means the principles or techniques that can be incorporated in a covered process+regulated by the *Toxic Catastrophe Prevention Act (TCPA)* to minimize or eliminate potential for a release of an extraordinarily hazardous substance (EHS).+ This includes:

- Reducing the amount of EHS material that may be released.
- Substituting less hazardous materials.
- Using EHSs in the least hazardous process conditions or form; and
- Designing equipment and processes to minimize potential for equipment failure and human error.

What facilities are covered by the rule?

Approximately 90 New Jersey facilities regulated by TCPA. These include chemical, plastic, and pesticide manufacturing plants, oil refineries, major food processors, water and wastewater treatment, and liquefied petroleum gas facilities. See a list of TCPA facilities at the end of this fact sheet.

What does an owner or operator have to do to comply with the rule?

They must complete an IST review report and must submit it to DEP. The report shall identify available IST alternatives or combinations of alternatives that minimize or eliminate the potential for an EHS release.+

What is a "covered process"?

A covered process is any activity involving use, storage, manufacturing, handling, or on site movement of an EHS material that meets or exceeds the threshold quantity.²

Who conducts the IST review?

The rule says shall be a team of qualified experts, convened by the owner or operator, whose members shall have expertise in environmental health and safety, chemistry, design and engineering, process controls and instrumentation, maintenance, production and operations, and chemical process safety.+ The names, qualifications, and experience of team members must be in the report.

Can workers and their union participate in the IST review?

DEP says that the review must include front line workers and their representatives+ (Source: DEP PowerPoint Presentation, June 17, 2008).

While there is no specific language about this in the DEP IST rule, Section 68.83 of the federal EPA rules for accidental release prevention requires shall be consultation with employees and their representatives and ensures union access to information. These EPA rules are also enforced by DEP.

¹ Contra Costa County, California has a limited regulation for IST.

² As of March 2009, threshold quantities are detailed in TCPA rules.

Who selects the employees that participate in the IST review team?

The employees that participate to the PHA and IST team must have the specific knowledge and experience stated in the team requirements. The responsibility to comply with the TCPA and the methods chosen to achieve such is that of the owner or operator of the facility.³

Must the owner or operator implement the IST alternatives identified?

No. They must determine whether the IST alternative is feasible. According to the rule, *feasible* means capable of being accomplished in a successful manner, taking into account environmental, public health and safety, legal, technological, and economic factors.+

If they decide not to implement the IST, they must provide a written justification using a qualitative and quantitative evaluation of environmental, public health and safety, legal, technological, and economic factors.

If they decide to implement the IST, they must provide a schedule of when they will do it.

How often do they have to conduct an IST review?

The owner or operator must complete and submit to DEP an initial review report within 120 days from the rule's effective date. Chemical plants that already completed IST reports under the state's *Best Practices Standards* can submit this existing report to comply with the rule.

An update is required every five years for all covered processes and at the same time as the updates of applicable hazard reviews or process hazard analysis. An update of the IST review is also required when there is a major change.

If the five-year update of the applicable hazard review or process hazard analysis is due within two years of the initial IST review, then the IST review does not need to be updated at that time.

Is this information subject to public disclosure?

An owner or operator may file a claim with DEP to withhold from public disclosure confidential information included in an IST review report.

How will this rule be enforced?

DEP will review IST reports, inspect facilities and can apply financial penalties for violations.⁴

How does this rule improve upon current requirements?

TCPA, enacted in 1986 after the disaster in Bhopal, India, authorized DEP to require IST reviews. In 2003, DEP issued such rules. but they only applied to the few *newly designed and constructed processes*. In 2005, after WEC and our allies defeated a DEP deal which would have let the chemical industry regulate itself, NJ issued mandatory *Best Practices Standards (BPS)* for chemical plants. These required 43 TCPA facilities to conduct one-time IST reviews.

Four significant improvements of the IST rule over BPS are:

- 1) BPS only covered chemical plants. The IST rule also covers other types of facilities.
- 2) BPS required only a one-time review of IST. The IST rule requires periodic reviews.
- 3) BPS required the IST review to be conducted by a *qualified expert* in chemical process safety+. The rule would require a *team* of qualified experts+to conduct the review. Moreover, management must consult with workers and their unions.
- 4) BPS did not have a specific mechanism for enforcement. The IST rule includes financial penalties for noncompliance.

Some New Jersey IST Success Stories

Source: DEP, January 15, 2010

Since the implementation of New Jersey's IST Review rule, 41 of the 85 facilities that have conducted reviews have implemented or planned to implement IST measures. *WEC does not believe that all IST measures identified by facilities should be accepted IST measures (ie – labeling of pipes and other equipment).*

Substitution of a less hazardous substance

- Wastewater treatment facilities have switched from using chlorine to sodium hypochlorite for disinfection of their treated wastewater.
- Electric generation and cogeneration plants substituted anhydrous ammonia with aqueous ammonia for use in their air pollution control systems.

Reduction in the amount of a hazardous substance stored on-site

- A facility replaced bulk storage of acetylene with onsite generation for direct consumption into the process.
- A facility switched from bulk storage of chlorine to on-site generation of ozone for disinfection of potable water.

Where can I get more detailed information?

Go to the DEP website TCPA page at: <http://www.nj.gov/dep/rpp/brp/tcpa/tcpanews.htm>
There are additional links here to key documents, such as the TCPA law, the IST rule, *Frequently Asked Questions*, etc.

Whom can I contact for further technical questions about the rule?

Iclal Atay or Paul Komosinsky
Bureau of Release Prevention
New Jersey Department of Environmental Protection
(609) 633-0610
Email: iclal.atay@dep.state.nj.us or paul.komosinsky@dep.state.nj.us

This fact sheet is issued by the New Jersey Work Environment Council, 142 West State Street, Third Floor, Trenton, NJ 08608. Telephone (609) 695-7100. More information is also available on WEC's web site at www.njwec.org.

³ Source: NJ DEP website: Inherently Safer Technology, Frequently Asked Questions.

⁴ Penalty amounts are on pages 178, 180-184, 217, 220-223 of the TCPA Consolidated Rule Document available at www.nj.gov/dep/rpp/brp/tcpa/tcpadown.htm.