

The New Jersey Community Right to Know Program

Toxic Chemical Use at Some of New Jersey's Largest Facilities

This data fact sheet is a preview of the 2011 data reported by New Jersey companies under the New Jersey Worker and Community Right to Know (W&CRTK) Act and regulations. The information includes two types of toxic and hazardous chemical data. One type of data are called materials accounting, or chemical use, data. These data, collected on the Release and Pollution Prevention Report (RPPR), provide an understanding of how hazardous substances are used at and move through an industrial facility during a calendar year. Materials accounting is comprised of many data elements (Table 1) to present this picture. The three main components presented here are Use, Nonproduct Output (NPO), & Releases (Figure 1).

Table 1. 2011 RPPR Data – Key Components of Chemical Use (pounds)

Number of Facilities	383
Number of Substance Reports	1,455
USE	16,982,979,844
Consumed	2,444,399,153
Shipped as (or in) Product	14,367,016,903
Nonproduct Output	171,563,788
Nonproduct Output	171,563,788
On-Site Releases	11,075,530
On-Site Management	116,986,748
Off-Site Transfers	43,530,642
On-Site Releases	11,075,530
Stack Air Emissions	1,841,509
Fugitive Air Emissions	434,052
Surface Water Discharges	8,698,840
Ground Water Discharges	9
Land Disposal On Site	101,120

Table 2. Top 10 Industry Groups for Chemical Use - 2011

NAICS CODE	NAICS Description	# of Facilities	# of Reports	USE (pounds)
324	Petroleum & Coal Products Manufacturing	16	123	8,981,571,670
424	Chemical & Petroleum Wholesalers	27	234	5,611,874,514
325	Chemical Manufacturing	122	530	1,723,408,329
331	Primary Metal Manufacturing	32	115	437,804,209
326	Plastics and Rubber Products Manufacturing	21	39	122,459,806
332	Fabricated Metal Products Manufacturing	38	113	54,409,101
336	Transportation Equipment Manufacturing	4	9	20,864,225
221	Electrical Utilities	11	86	10,735,189
333	Machinery Manufacturing	13	29	4,281,777
339	Miscellaneous Manufacturing	17	27	3,400,251

Use: Use is the quantity of hazardous substances processed at the facility. Use is calculated by adding together the quantity consumed in processes, the quantity shipped as (or in) product, and the quantity generated as NPO.

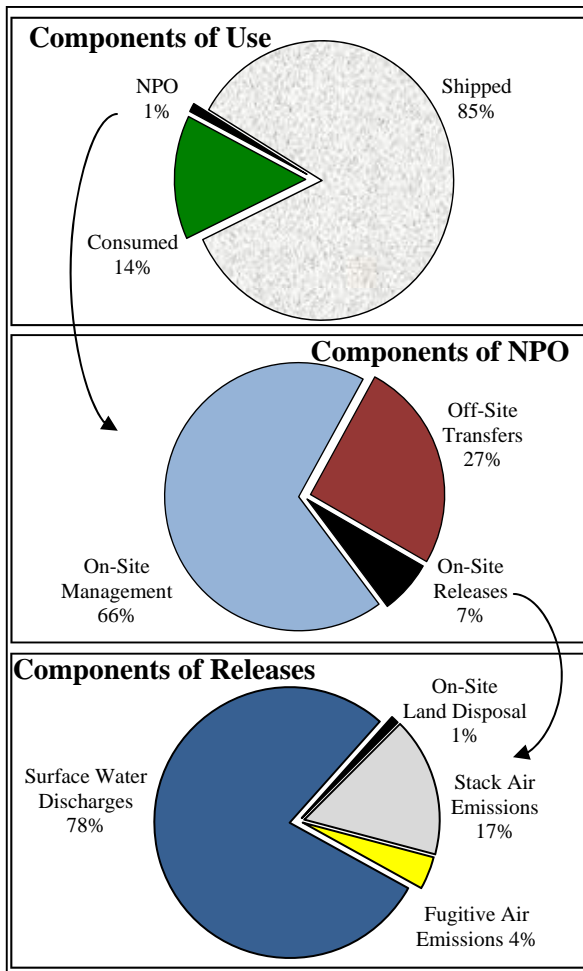


Figure 1. Toxic Chemical Use - 2011

Table 3. Top Industry Groups for Nonproduct Output - 2011

NAICS CODE	NAICS Description	# of Facilities	# of Reports	NPO (pounds)
325	Chemical Manufacturing	122	530	97,389,709
331	Primary Metal Manufacturing	32	115	31,050,152
336	Transportation Equipment Manufacturing	4	9	10,296,851
324	Petroleum & Coal Products Manufacturing	16	123	10,008,697
332	Fabricated Metal Products Manufacturing	38	113	9,135,012
221	Electrical Utilities	11	86	4,073,877
339	Miscellaneous Manufacturing	17	27	1,571,580
322	Paper Manufacturing	8	20	1,452,731
311	Food Manufacturing	14	23	1,215,668
333	Machinery Manufacturing	13	29	1,106,691

Nonproduct Output (NPO): NPO is the quantity of hazardous substances that were generated prior to storage, out-of-process recycling, treatment, control or disposal, and that were not intended for use as a product. NPO is calculated by adding the quantities of on-site releases, managed on-site, and off-site transfers.

On-Site Releases: On-site releases include those quantities of hazardous substances that were released as stack and fugitive air emissions, discharged to surface waters and ground waters, and on-site land disposal.

The RPPRs are to be submitted by July 1 following the reporting year.

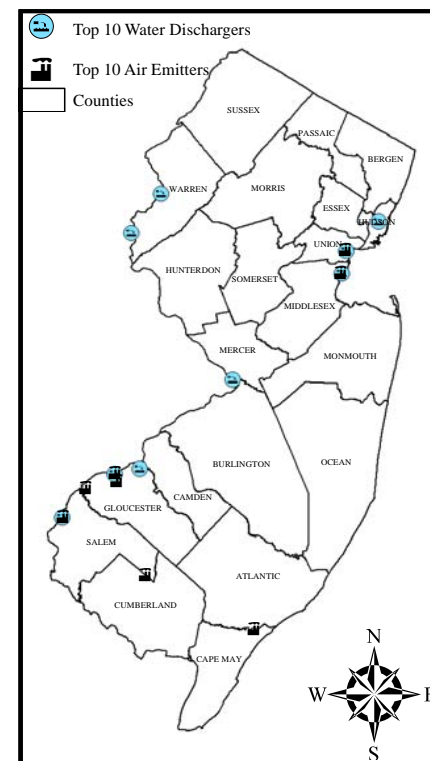


Figure 2. Locations of Facilities for the Top 10 Total Air Emissions & Top 10 Surface Water Discharges

What does the RPPR Data Show?

An evaluation of the Use data, for 2010 and 2011 shows that production increased by nearly 6% for facilities that reported in both years. This is the first increase since reporting year 2007.

The quantity of hazardous substances reported by all facilities shipped as (or in) product increased by 7% from 2010 to 2011; the quantity consumed in process decreased by 0.5%; while the quantity reported as NPO decreased by more than 2%. Figure 3 presents the distribution of substances shipped as (or in) product by industry sectors in 2011. Four main industry sectors account for 99% of toxic chemical shipments.

Total on-site releases for all industry sectors decreased from 12,717,976 pounds in 2010 to 11,075,530 pounds in 2011, a 13% reduction. Air releases decreased by nearly 45%; water discharges increased more than 2%; and on-site land disposal decreased by 13%.

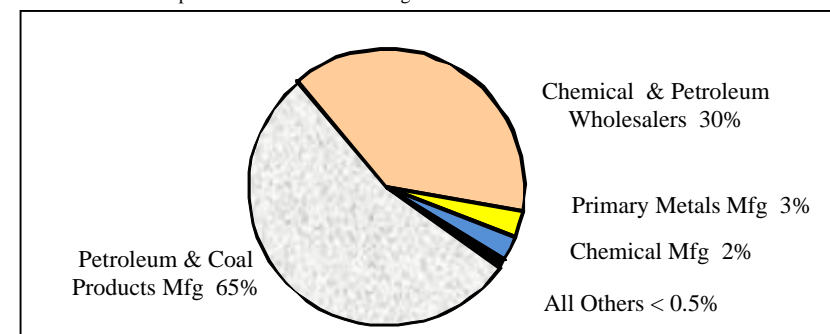


Figure 3. Percent of Toxics Shipped by Industry Sector - 2011 RPPR

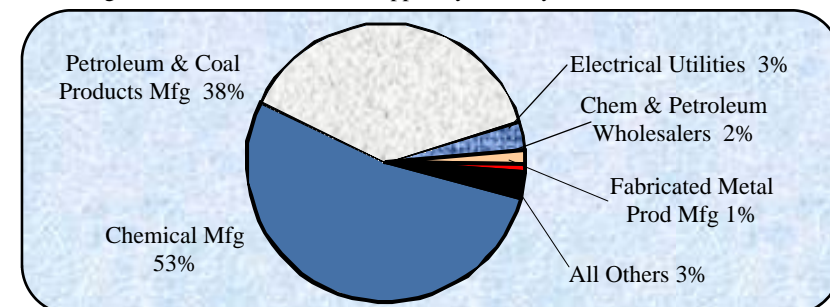


Figure 4. Percent of Toxics Released by Industry Sector - 2011 RPPR

Hazardous Substance Inventory at New Jersey Facilities

The other type of information collected on hazardous substances are called chemical inventory data. These data, collected annually on the Community Right to Know (CRTK) Survey and due by March 1 for the previous year, provide information on hazardous substances present at facilities during the reporting year. These data are useful for communities and emergency management and emergency response personnel. Table 4 presents the number of facilities by county and the number of hazardous substance listings reported by those facilities for 2011. Table 5 shows a list of the top 10 industry groups, by the number of facilities, that reported hazardous substance inventories for 2011. Table 6 shows the top 20 most frequently reported substances for 2011. It can be seen that two-thirds of all chemical reports are for the top 20 substances for 2011.

Table 4. The Number of CRTK Facilities and Hazardous Substances Reports Submitted by County - 2011

COUNTY	# of Facilities	# of Reports
BERGEN	880	3,163
MIDDLESEX	854	3,875
ESSEX	617	2,753
MORRIS	546	1,756
UNION	523	2,623
MONMOUTH	511	1,427
PASSAIC	479	1,720
BURLINGTON	420	1,455
CAMDEN	411	1,374
HUDSON	370	1,396
OCEAN	352	908
MERCER	337	1,051
SOMERSET	322	1,644
GLOUCESTER	273	1,733
ATLANTIC	207	574
HUNTERDON	177	554
SUSSEX	166	437
CUMBERLAND	155	572
WARREN	154	733
CAPE MAY	86	224
SALEM	70	804
Total:	7,910	30,776

Table 5. Top 10 Industries by Number of Facilities — 2011 CRTK Survey

NAICS CODE	NAICS Description	# of Facilities	# of Substances	# of Reports
447	Gasoline Stations	1,864	44	3,475
812	Personal & Laundry Services	658	35	777
424	Merchant Wholesalers, Nondurable Goods	547	236	2,084
517	Telecommunications	535	13	1,169
811	Repair & Maintenance	414	116	1,150
325	Chemical Manufacturing	411	319	3,846
441	Motor Vehicle & Parts Dealers	297	77	1,004
221	Utilities	244	48	975
332	Fabricated Metal Product Manufacturing	237	99	1,235
423	Merchant Wholesalers, Durable Goods	196	114	757

Table 6. The Top 20 Most Frequently Reported Environmental Hazardous Substances on the 2011 Community Right to Know Survey at any Inventory Quantity

CAS #	SUBSTANCE NAME	# of Facilities	# of Reports
68476-34-6	DIESEL FUEL OR #2 HEATING OIL	2,557	3,428
8006-61-9	GASOLINE	2,713	2,937
7664-93-9	SULFURIC ACID	1,884	2,435
7439-92-1	LEAD	1,932	2,165
107-21-1	ETHYLENE GLYCOL	1,210	1,901
74-98-6	PROPANE	1,144	1,463
67-56-1	METHANOL	492	813
127-18-4	TETRACHLOROETHYLENE	625	706
108-88-3	TOLUENE	270	571
74-86-2	ACETYLENE	448	484
1330-20-7	XYLENE (MIXED ISOMERS)	256	472
67-63-0	ISOPROPYL ALCOHOL (MFG-STRONG ACID PROCE	234	404
75-45-6	CHLORODIFLUOROMETHANE [HCFC-22]	196	397
8008-20-6	KEROSENE	292	375
N230	GLYCOL ETHERS (EXCEPT SURFACTANTS)	145	367
7440-50-8	COPPER	209	326
7647-01-0	HYDROCHLORIC ACID	199	326
N982	ZINC COMPOUNDS	163	307
7664-41-7	AMMONIA	157	212
			20,089

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NJ Community Right to Know Survey and Release & Pollution Prevention Report Public Data Fact Sheet for 2011



A program designed to collect information about the storage, release and transfer of hazardous substances in the community and to provide citizens and government agencies with access to that information

April 2013

Chris Christie, Governor
 Kim Guadagno, Lt. Governor
 Bob Martin, Commissioner