

EMFACT Workshop

EMFACT Overview – Part 2

Northeast Waste Management Officials Association (NEWMOA)

January 2009

Workshop Agenda Workshop Agenda <u>EMFACT</u> Energy & Materials Flow and Cost Tracker

- EMFACT Overview Part 2
 - Link: Materials, Products, Air Sources, Emissions, Air Factors, Water Discharge, Water Pollutants, Waste Types
 - Inputs: Materials Purchase, Material Usage
 - Outputs: Product Volume, Air, Wastewater, Waste Management (Shipment)
 - Reminders
 - Help
 - Reports

EMFACT Process Flow



Materials

Number)

Product

Air

Water

Materials Defined List

Materials Purchased or Materials

Product: Weight per CAS Number

Usage (Weight per Material, Weight)

Emissions (Weight per Pollutant with 12 Month Rolling, by MSDS VOC%)

per Material with 12 Month Rolling)

Used (by Dept, Weight per

Material, or Weight per CAS

Install/Set Up EMFACT

Download EMFACT

- Install
- Initial Setup

			aste Type List PA Codes per Waste Typ
2 Set Up Admin			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
User List Drop Down Lists Facility Location List			
 Building List Department List 		6	Define Regulations
	1		ermits List
3 Define Materials			ermit Details hemicals of Concern
Material List Material Detail			
CAS Number List			
		7	Link Equipment,
4 Define Equipment		1	Prod Units, & Produc
Equipment List			nk Equipment nk Production Unit
Equipment Detail Production Unit List Production Unit Detail			nk Product

Define Outputs Materials Purchased Products List Prepare Electronic Data File Intermediate Products List Import Purchases (electronically) Air Source List View Data List Air Source Detail Manage List Water Discharge Point List Enter Purchases (manually) te Type Material Usage Enter Water Use Enter Fuel/Paint/Other Air Use View List 8 n



Enter

Inputs

Compute/Determine Outputs

Product Output Enter Product Volume

- Non Product Output
- oducts

Usage (Weight per Material) Discharge (Weight per Material,

Run

Reports

Weight per Pollutant)

Waste Management

- Activity Costs
- Chargeback Costs

Mass Balance

Mass Balance Purchased

- Compute Air Emissions
- Enter Wastewater Discharge
 - Wastewater Discharge with Pollutants
 - Waste Management List
 - Waste Management Detail
- Materials Calendar Reminder List Calendar Reminder Details
 - View Calendar Events Coming Due

Set Up / View

Reminders

3

Energy & Materials Flow and Cost T	racker (EMFA	(CT)							
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PB11-LINE	▼ Nam	e: Painting Line				A	ctive?	2	
-ocation: Column H					Departmer	nt: 1111		•	
Description: Line of Painting of	perations								
Materials Products Air	Source	Emission Air Fact	ors Discharge	Water Pol	II Waste	٦			
Material ID		Material Name	Material Type		Manufactu	rer Name	1	Active?	Update Date
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					Product				
			•	F	Product				

Link

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NOTE: The "link" process is the <u>same</u> for Equipment or Production Units

EMFACT Energy & Materials Flow and Cost Tracker

Link Equipment OR Production Unit

You must "link" materials, products, air sources, emissions, air factors, water discharge, water pollutants, and waste types to **Equipment** or a **Production Unit** in order to associate material usage (**Inputs** and **Outputs**)

All of the objects to link <u>must be setup or</u> <u>defined</u> prior to linking

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Energy & Materials Flow and Cost Tracker le Edit Setup Define Link Inputs Out		ndow Help			
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Production Unit Links for: PB11-LINE					
Production Unit ID: PB11-LINE -	Name: Painting Line		Activ	/e? 🗵	
-ocation: Column H			Department: 1111	•	
Description: Line of Painting operation					
Materials Products Air Source	ce Emission Air Facto				
Material ID	Material Name	Material Type	Manufacturer Name	Active?	Update Date 00/00/0000
PAINT100 - Pr	roduct Paint	PAINT			12/14/2008
		200-501			
		Lin			1 of 1 Berord
Enable Advanced Field	S.	Lin	k Inputs Outputs		1 of 1 Records
Enable Advanced Field	s	Lin	k Inputs Outputs Equipment		
Enable Advanced Field	S		k Inputs Outputs		

 \square Link \rightarrow Production Unit

NOTE: The "link" process is the <u>same</u> for Equipment or Production Units

EMFACT Energy & Materials Flow and Cost Tracker

Link Production Unit

In this example, we will be linking objects to a **Production Unit**

Select the **Production Unit** to link

The Materials tab is open

Click the **binoculars** icon to launch the search process to add a **Material**

Click **NEW** to add more than one material

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Energy & Materials Flow and Cost Tracker (EMFACT) File Edit Setup Define Link Inputs Outputs Reports Reminde	rs Window Help			
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Production Unit Links for: PB11-LINE				
Production Unit ID: PB11-LINE - Name: Painting Line		Active?		Click the Product tab to
-ocation: Column H	Department: 111	1 -		
Description: Line of Painting operations		_		open
Materials Products Air Source Emission Air	Factors Discharge Water Poll Waste	Active2 Undets Date		
Product Model No V100 ▼ Painted Case		Active? Update Date		Select the Product Model
ntermediate Product: IP-101	Painted Part 101			
Comments:				No. from the dropdown
V100 Painted Case		☑ 12/14/2008		-
ntermediate Product IP-102	Painted Part 102			la this evenesia, we have
Comments:				In this example, we have
V100 Painted Case	Deleted Det 102	₩ 12/14/2008		selected all of the
ntermediate Product IP-103 Comments:	Painted Part 103			Intermediate Products
))		
				associated with Product =
				V100
			1 of 3 Records	
Enable Advanced Fields			LIN002	

(**SAVE** is recommended after you select the objects in each tab)

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Energy & Materials Flow and Cost Tracker (EMFACT) File Edit Setup Define Link Inputs Outputs Reports Reminders Window Help	Link D	reduction Unit
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Production Unit Links for: PB11-LINE Yroduction Unit Line Name: Painting Line Active?		
	Click th	ne Air Sources tab
Jescription: Line of Painting operations	to oper	ו
Materials Products Air Source Emission Air Factors Discharge Water Poll Waste		
Air Source ID Air Source Categor Active? Update Date	Calast	
AlR-001 Ambient Air Vents - Sky vents, skyligh 12/14/2008		the Air Source ID
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	than or	ne air source
Enable Advanced Fields	of 1 Records	

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Energy & Materials Flow and Cost Tracker (EMFACT) File Edit Setup Define Link Inputs Outputs Reports Reminders Window Help	
	Link Production Unit
Materials Equipment Products LinkEquip Link Pr Unit Import Input Water Input Mail Air Out Water	
Location: Column H Department: 1111	Click the Emissions tab
Jescription: Line of Painting operations	to open
Materials Products Air Source Emission Air Factors Discharge Water Poll Waste	1
Paint/Spray Booth Paint/Spray Booth OC control Efficiency %: 00 Other Material Not Applicable Default Units: Ounces, vol.	Select the Emissions Source Type and the Default Units
	For PAINT , enter the VOC and/or TSP Control Efficiency %
Enable Advanced Fields	

Production Unit Links	Products Link Equip Link Pr Unit	Reports Reminders		at 🖓 🕉 🕍 te Dut Now Doleto Pietriew	re Save Print Exit	
duction Unit ID: F		ne: Painting Line		Department: 1	Active?	
Material ID: Proc Pollutant: TSF mission Factor: 0 Comments:		<u> </u>	Paint Only Density: 10.840 <u>Pollutant Content:</u> 3.080 Pollutant%: <u>28.413</u>	Air Sourc	re?	
Material Type is Pair	omputed as usage qty t/Coating then:		sage based) otherwise usage h Ctrl Efficiency%) where polluta			

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Energy & Materials Flow and Cost Tracker

Link Production Unit

Click the **Air Factors** tab to open

Select the Material ID and Pollutant from the dropdown

For **PAINT**, enter the **Pollutant Content**

Production Unit Links for: PB11-LINE duction Unit Links for: PB11-LINE occation: Column H Department: 1111 scription: Line of Painting operations Materials Products Air Source Emission Air Factors Discharge Water Poll	
Flow No. Discharge Serial No. Active? Jpdate Date: Image: Scharge Desc: Image: Scharge Type: Image: Scharge Type:	
Comments: I 123-456 NPDES Water Discharge I2/14/2008 scharge Desc: Continuous Ischarge Type: Dilute Waste Water Image: Comments: Comments: Image: Comments: Image: Comments: Image: Comments: Image: Comments:	

 \square Link \rightarrow Production Unit

EMFACT

Energy & Materials Flow and Cost Tracker

Link Production Unit

Click the **Discharge** tab to open

Enter a **Flow No.** and select a **DSN** from the dropdown list

Select a **Discharge Description** and **Discharge Type**

Click **NEW** to add more than one water discharge point

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Materials Equipment Prod		ip Link Pr Unit Import	Input Water Input Air	Input Mell Air Ou	🛎 A. Water Dut. Wa	📫 🙀 ste Out New	Solete	M Petrieve	M Save	👜 Print	∏ ∳ Exit		
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Production Unit I	D: PB11-LINE	▼ <u>Name:</u> P	ainting Line						Acti	ve? 🦻	l.		
-ocation: Co	lumn H					De	epartmer	it: 111	1		-		
)escription: Lin	e of Painting ope	erations											
Materials P	roducts Air S	Source Emis	sion Air Fac	tors Discha	urge Wat	er Poll	Waste	٦					
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Ena	ble Advanced F	fields										1 of 1 Recor	

 \square Link \rightarrow Production Unit

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Energy & Materials Flow and Cost Tracker

Link Production Unit

Click the Water Poll (pollution) tab to open

Select a **Flow No.** from the dropdown (one or more **Flow No.** will appear in the dropdown as defined on the **Discharge** tab)

Select the **Potential Pollutant** from the dropdown list

-	Unit	
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Energy & Materials Flow and Cost Tracker (EMFACT) Ele Edit Solution Define Link Lowette Outputs Reporte Reminders Window Hele		
File Edit Setup Define Link Inputs Outputs Reports Reminders Window Help		Link Production Unit
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Viroduction Unit ID: PB11-LINE ▼ Name: Painting Line Active?		
		Click the Waste tab to
Vescription: Line of Painting operations		onen
Materials Products Air Source Emission Air Factors Discharge Water Poll Waste		open
Naste Type: >hysical State: Hazardous? Active? Update Date Filters Liquid * Solid * Sludge * Other P P 12/14/2008 Comments:		Select a Waste Type from the dropdown
		Click NEW to add more than waste type
Enable Advanced Fields	1 of 1 Records	NOTE: You can reopen and update the tabs as often as it is necessary
	LIN002	
		Use the New and Delete

buttons in the toolbar to add or remove detail.

Be sure to click **Save** when you are done!



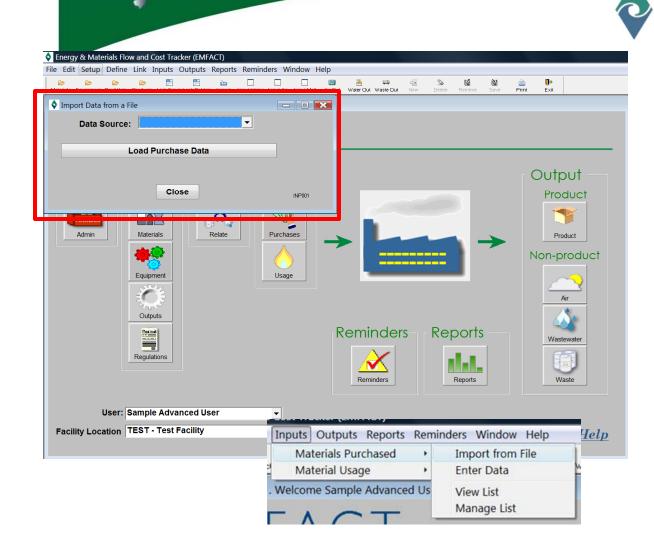
Let's try EMFACT LINK now....

Link a Production Unit to a Material

Review additional tabs

Inputs and Outputs

- At this point, all objects have been linked to the Production Unit and we are ready to proceed to the next steps in the EMFACT process, entering Inputs and Outputs
- INPUTS: track the materials and costs that go into a piece of Equipment or Production Unit
 - Materials Purchase
 - Material Usage
- **OUTPUTS:** track goods that are produced at a piece of **Equipment** or **Production Unit**, along with air emissions and wastewater discharge associated with the production of the goods
 - Product Volume
 - Air, Wastewater
 - Waste Management (Shipment)



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EMFACT Energy & Materials Flow and Cost Tracker

Input Material Purchased

There are two methods to enter **Material Purchased** – electronically through a file upload (data upload template provided with EMFACT) or manually

We will first review the EMFACT file upload process

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		Purchase	Purchase	Purchase	Purchase	Department	
	Material ID	Date	Unit	Quantity	Cost	ID	
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Data Upload Template - REQUIREMENTS

11/1/2008 Case

Material IDs must be set up in EMFACT

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NE

Purchas

GLIDDEN1

1

2

3

Purchase Unit – this is the Size Purchase Unit established for the Material ID (Container tab on the Material Detail window) (e.g., bucket, drum, etc.)

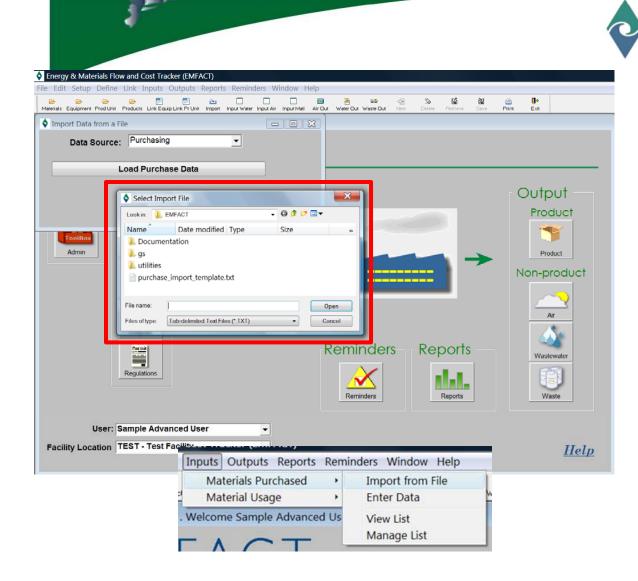
Department IDs must be set up in EMFACT

EMFACT Energy & Materials Flow and Cost Tracker

Material Purchased Upload

Using the data upload template provided with EMFACT, obtain electronic data from your purchasing department and copy it to the template

Once the file is complete, select File > Save As to save the file to a tab-delimited text file (filename.TXT)



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EMFACT Energy & Materials Flow and Cost Tracker

Material Purchased Upload

The Select Import File window will open

Navigate to and click on the TXT file you have save with the Material purchase information

Click Open

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Save Data						
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Material ID	Purchase Date	Purchase Qty/Units		aterial Cost (US\$)	Record Status	
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GLIDDEN1	11/01/2008	3 Case	.00	\$1,000.00	Unknown Material	
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		Inputs Out	puts Reports	Reminders	Window Help	1
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			s Purchased	• Impo		
		Material Material	s Purchased	Impo Ente	ort from File r Data	

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Inputs → Materials Purchased → Enter Data

EMFACT Energy & Materials Flow and Cost Tracker

Material Purchased Entry

You may also enter **Material** purchased data manually by selecting **Enter Data** from the menu

Select the **Material ID** and enter the required data:

- Purchase Date
- Original Purchase Quantity
- Original Purchase Units
- Purchase Quantity (Lbs.)
- Material Cost (optional)

Click **SAVE** after each entry

The data entered will appear in the window below

Production Unit/ Equipment ID: Department 1111	b Define Link Inputs Outputs Reports Reminders Window Help In Produbil Produce Link Equip Link Pruhi Import Input Water Input Mail Air Out Water Dut Water											
Materials Equipment Products Link Equip Link Pr Unit Import Input Water Input Air Input Mat Air Dux Water Dut Waste Out Veste	It ProdUbit											
Materials Equipment Products Link Equip Link Pruhi Imput Water Input Air Input Mail Air Dut Water Dut Waste Dut Nev Delete Flerieve Save Print Enter Water Usage Production Unit/ Equipment ID: PB11-LINE Department Department Inits Frequence	ni Produbit Products Link Equip Link Pr Unit Import Input Water Input Air Input Mait Air Dut Water Dut Waste Dut New Delete Retrieve Save Print Ex r Usage n Unit/ PB11-LINE Material ID: Usage Date VATER 00/00/0000 00 Gallons Frequency Gallons frequency So far							📮 🗔	*>	Ri I		<u>ر</u>
Production Unit/ Equipment ID: PB11-LINE Department 1111 Material ID: Usage Date Usage Qty Units Frequence WATER 00/00/0000 .00 Gallons Image: Comparison of the second seco	n Unit/ PB11-LINE <u>Material ID:</u> Usage Date Usage Qty Units Frequency WATER 00/00/0000 .00 Gallons ge Cost (US \$): 0.00 Comment: so far <u>I Unit / Material ID</u> Date <u>Qty/Units</u> Frequency in Lbs.	laterials Equipment Prod Unit	Products Link Equ	ip Link Pr Unit Import		Input Matl Air Ou	t Water Out W					Print
WATER 00/00/0000 .00 Gallons	WATER 00/00/0000 .00 Gallons ge Cost (US \$): 0.00 Comment: so far Unit / Material ID Date Start Qty/Units Frequency Qty in Lbs.	Production Unit/	PB11-LINE	•					Dep	artment	1111	
Save Usage Cost (US \$): 0.00 Comment:	so far I <u>Unit / Qty</u> ID <u>Date Qty/Units Frequency in Lbs.</u>		-				<u>Usage C</u>				<u>Freque</u>	
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Inputs Outputs Reports Reminders Window Help Materials Purchased Image	Inputs Outputs Reports Reminders Window Help Materials Purchased Image	Usage Report			. We	Icome Sampl	e Advanced	E		/Paint/Of er Materi		Use

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Inputs \rightarrow Material Usage

The data in this section displays for one day and then it is reset.

Click the UPDATE button to EDIT or DELETE the usage entry record EMFACT Energy & Materials Flow and Cost Tracker

Material Usage Entry

Enter Water usage

Select Equipment or Production Unit

Enter the required data:

- Usage Date
- Usage Quantity
- Units (defaults to Gallons)
- Frequency

Click **Save Usage** and the usage will calculate and display in the **Entered Data so far...** section of the window

► Energy & Materials Flow and Cost Tracker (EMFACT)	
File Edit Setup Define Link Inputs Outputs Reports Reminders Window Help	
	🔊 🖆 🚵 🕩 elete Hetreve Save Print Exit
Enter Material Usage with Air Emissions	
Production Unit/ Equipment ID: PB11-LINE Department	ment 1111 <u>Source</u> <u>Type:</u> Paint
PAINT100 - 00/0	age Date Usage Hours Usage Qty/Units 00/0000 000000000000000000000000000000
Save Usage Cost (US \$): 0.00 Comment:	
Production Unit/ Equipment ID Material ID Jsage Date Isage Hours Usage Qty/Units PB11-LINE PAINT100 12/01/2008 10.00 4.00 Ounces, vol	N. Update/View Emissions
Inputs Outputs Reports Remin Materials Purchased Material Usage Welcome Sample Advanced Us	Enter Water Use Enter Fuel/Paint/Other Air Use Enter Other Materials Use
Usage Report Usage with 12 month Rolling Report FACT	View List Manage List

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Inputs \rightarrow Material Usage

The data in this section displays for one day and then it is reset.

Click the UPDATE/VIEW EMISSIONS button to EDIT or DELETE the usage entry record EMFACT Energy & Materials Flow and Cost Tracker

Material Usage Entry

Enter Air usage

Select Equipment or Production Unit

Enter the required data:

- Material ID
- Usage Date
- Usage Hours
- Usage Quantity/Units

Click **Save Usage** and the usage will calculate and display in the **Entered Data so far...** section of the window

\sim Inputs \rightarrow Material Usage

Contractions and the contraction of the contraction		port Input Water In	put Air Input Matl A	ir Out Water Out Wa	este Out New	Delete Retri			l+ xit
Enter Material Usage <u>Material ID:</u> OTHER				<u>Usage</u> 00/00/00	Date	iginal Usage Qty .(e <u>Origina</u> <u>Un</u>		Usag Qty (Lt
Production Unit/ save Usage Cost (Us	• S \$):	.00 Comm	ent:		Dept:		▼ <u>Fr</u>	equency:	
itered Data so far									
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The data in this section displays for one day and then it is reset.

Click the UPDATE button to EDIT or DELETE the usage entry record EMFACT Energy & Materials Flow and Cost Tracker

Material Usage Entry

Enter **Other Material** usage

Select Material ID

Enter the required data:

-Equipment or Prod Unit

- Usage Date
- Original Usage Quantity
- Original Usage Units
- Usage Quantity (Lbs.)
- Frequency

Click **Save Usage** and the usage will calculate and display in the **Entered Data so far...** section of the window

Inputs \rightarrow Material Usage

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	Prod Unit Products Link Equip Link Pr Unit	Import Input Water I	Input Air Input Mall	Air Out Water C	ut Waste Dut	New	Delete	Retrieve	Save	Print	Exit		
Material Usag	e List Filter Data												
	Material Id:		•								Refresh	Data	
	Usage Date From: 11/	16/2008	To: 12/16/2	2008 - F	roductio					•	Clear	ilter	
	Usage Date From. 11/	10/2000	10. 12/10/2	2000	Equipm	ent ID:				<u> </u>	More		
Meterial	Material	Ctart llagan	Ctort lloans	Linese Mbr	lleese		_	Heese			lleage	Fauinman	
Material ID	Material Name	Start Usage Qty	Units	in Lbs.	Usage Hours	Freque	ncy	Usage Type	Depar	tment	Usage Date	Equipmer ID	t
OTHER	Sample Other Material	10.00	OZ, VOL.	10.00	.00	Daily	(Other	1111		12/01/2008	3	F
PAINT100	Product Paint	4.00	Ounces, vol.	.3388	10.00		F	Paintman	1111		12/01/2008	3	F
				.3388	4.00	1	F	aintman	1111		12/10/2008	3	F
PAINT100	Product Paint	4.00	Ounces, vol.	.0000									
WATER	Water - Do Not Delete	10,000.00	Gallons	83,000.00	.00	Monthly	٧	Vater	1111		12/01/2008	3	F
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WATER	Water - Do Not Delete	10,000.00	Gallons	83,000.00	.00	Monthly	٧				12/01/2008	3	F
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WATER	Water - Do Not Delete Water - Do Not Delete	10,000.00 36,000.00 uts Reports	Gallons Gallons Reminder	83,000.00 298,800.00	.00 .00	Monthly	V	Vater			12/01/2008	3	F
WATER WATER	Water - Do Not Delete Water - Do Not Delete	10,000.00 36,000.00 nuts Reports Purchased	Gallons Gallons Reminder	83,000.00 298,800.00	.00 .00	Monthly	٧				12/01/2008	8	F

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Inputs → Material Usage → View List

EMFACT

Energy & Materials Flow and Cost Tracker

Material Usage Entry

The view the **Material** usage input, select View List from the **Material** Usage menu

Click on a record to **EDIT** or **DELETE** (accesses the **Manage Material Usage** window for the record type e.g., air, water, material)

Energy & Materials Flow and Cost Tracker (EMFACT)	
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	nr Dut Waste Dut New Delete Retrieve Save Print Exit
Senter Product Output Volume	
Product Model No. V100 IF - Painted Case	
Intermediate Product No.: IP-102 Painted Part 102	
Production Unit/ Equipment ID:	Department 1111
	out Qty Output Lbs. Frequency
Save Product Output	.00 Per Month 👻
Entered Data so far	
Production Unit / Output Product Model Nc Intermediate Product Nc Equipment ID Date	Output Qty/Units Frequency
V100 IP-102 PB11-LINE 12/01/2008	10 Each Daily Update
Out	tputs Reports Reminders Window Help
	Enter Product Volume
2	Manage Product Volume List
n	Air Emissions
	Enter Wastewater Discharge
	Wastewater Discharge with Pollutants
□ F	Waste Management List
	Waste Management Detail

Outputs

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The data in this section displays for one day and then it is reset.

AND COST TRACKE

Click the UPDATE button to EDIT or DELETE the usage entry record EMFACT Energy & Materials Flow and Cost Tracker

Outputs

Enter **Product Volume** output

Define the volume / quantity of **Product** and/or **Intermediate Product** produced during a given timeframe

Select **Product Model No.** and optionally **Production Unit / Equipment ID** and enter the required fields

Click Save Product Output and the usage will calculate and display in the Entered Data so far... section of the window

Energy & Materials Flow and Cost Tracker (EMFACT)	
File Edit Setup Define Link Inputs Outputs Reports Reminders Window Help	
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Air Emissions	
Filter Data:	3
Equipment ID: Usage Date From: 00/00/0000 Production Unit ID: Usage Date To: 00/00/0000	
Usage Record No.: Clear Filter	5
Production Unit	ource Type: Paint
Equipment ID: Production Uni PB11-LINE PB11-LINE Painting Line	۱ir Source ID:
Material ID: 1aterial Description: Usage Date Usage H	lours Usage Qty/Units
PAINT100 V Product Paint 12/01/2008 V	10.00 4.00 Ounces, vol. ▼ =
Cost (US \$): 0.00 Comment:	.3388 Lbs
Pollutant Emission (Lbs Start Date/Time	Updated: 12/16/2008
TSP .00 12/01/2008 00:0	
Outp	outs Reports Reminders Window Help
Usage Report Usage with 12 mth Rolling Report Usage with Emissions R	nter Product Volume
	Manage Product Volume List
A n	Air Emissions
E	nter Wastewater Discharge
	Vastewater Discharge with Pollutants
v	Vaste Management List

Outputs

NEWMOA

Waste Management Detail

EMFACT Energy & Materials Flow and Cost Tracker

Outputs

Review **Air Emissions** output

As data was recorded on the Enter Material Usage for Air Emissions, emissions per pollutant were calculated in Lbs based on the emission factors

The factors must be setup on the **Equipment Links** window or **Production Unit Links** window on the **Air Factors** tab

Refer to the **Air Factors** tab for a description of emissions algorithms.

					Cost Track			teminder	rs Windo	w Help								
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	_				_ aterial I⊑	; Outp	out Date			Out	put Qty		Units		Frequen	cy		
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		oment		Materi	al ID		Date_	9	Qty/Units		Freque		in Lb	<u>is.</u>				
	PB11	-LINE	W	ATER		12/01/200)8		1,000.00	Gallons	Daily	8	300.00		Update	e/View I	Pollutan	ts
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and Cost Tracker

Outputs

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EMFACT Energy & Materials Flow and Cost Tracker

Outputs

Input Water Discharge output

Select Production Unit or Equipment ID

Select Flow No. (must have been defined in Links Discharge tab)

Enter the required fields:

Click **Save Discharge** and the usage will calculate and display in the **Entered Data so far...** section of the window

💠 Energy & Materi	als Flow and Cost Tracke	er (EMFACT)				
	Define Link Inputs Ou					
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🔷 Wastewater Di	scharge with Pollutants					- D ×
	Filter Data: Equipment ID: Production Unit ID:	•	Usage Date Usage Da			
	Usage Record No.:			Clear Fi	Iters	
	nent ID: Production I		PB11-LINE Painting			-
Flow N	<u>umber:</u> 1 ▼ 12		NPDES Water Discl	•		
		Material I		Frequency	Usage Qty/Unit	=
Cost (US \$):	0.00	WATE	ER 12/01/2008	Daily 👻	1,000.00 G	allons
Comment:					8,300.00 L	bs
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Usa Usa	age Report Di	scharge Report	Enable Advan	ced Ente Was	missions r Wastewater Disch tewater Discharge w te Management List	with Pollutants
					te Management De	
				and Cost		

Outputs

NEWMOA

EMFACT Energy & Materials Flow and Cost Tracker

Outputs

Review Wastewater Discharge with Pollutants

You may view, edit or delete the calculated pollutant discharge data

View and make any necessary changes to the original entry **OR**

Complete one of the fields in the **Filter Data** section and click Retrieve

Click **SAVE** and any changes will recalculate

Energy & Mate	rials Flow and Cost Tracker (EM	IFACT)				
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			Outputs	Reports Reminders	Window Help	
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			Was	te Management List		
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				таскег		

Outputs

NEWMOA

When manifest information is entered, EMFACT tracks the number of days outstanding (**Days Not Returned** field) until the **Manifest Returned Flag** field is checked EMFACT Energy & Materials Flow and Cost Tracker

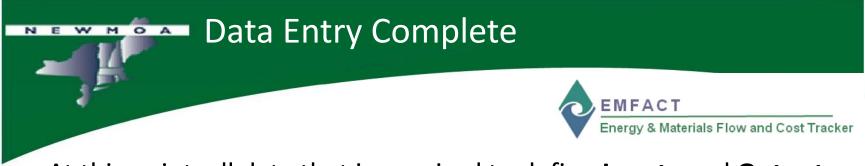
Outputs

Document **Waste Management** activity (waste shipments, Treatments and recycling)

Existing activities are listed

Click **NEW** to add a new activity

Select from dropdowns or input data into the required fields directly from this screen or click **More Detail** to see a full screen display with all fields available



- At this point, all data that is required to define Inputs and Outputs has been entered
- Before we move onto **Reports**, we will look at one more features of EMFACT
 - Reminders

Energy & Mat	terials Flow ar	nd Cost Track	ker (EMFACT)									
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Reminders

Click **NEW** to add a new Event or **double click** an **Event Record** to access the **Calendar Event Detail** window

EMFACT Energy & Materials Flow and Cost Tracker

Reminders

The **Reminders** feature enables users to track the renewal and expiration dates of permits, regulations, etc.

When permits and regulations are first set up, you have the option of entering the Issue, **Expiration**, **Renewal Due** and **Renewal Start Dates**

When this is done, EMFACT automatically creates calendar events and reminders

You can also set up independent calendar events for other reasons (e.g., audit reminders, etc.)

Energy & Materials Flow and Cost Tracker (EMFACT)		
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Reminders

EMFACT Energy & Materials Flow and Cost Tracker

Reminders

You may also access the **Event Details** window from the **Calendar Reminder Details** menu path

The **Event Details** window provides a full screen view of all fields available to manage events

Click **NEW** to add a new Event or **double click** an **Event Record** to access the **Calendar Event Detail** window

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Reminders

2	Reminders	Window Hel	р	
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e	View Calendar Events Coming Due		Coming Due	

EMFACT Energy & Materials Flow and Cost Tracker

Reminders

Click the **Reminders** icon on the EMFACT dashboard or select **View Calendar Events Coming Due** from the menu

If events are coming due, the **Reminders** icon on the EMFACT dashboard will be blinking



Double click an Event Record to access the Calendar Event Detail window or click MORE DETAIL



- EMFACT contains 21 reports to help track your air, water, and waste activities
- Access the EMFACT Reports Procedure Guide from Contents in the Help menu
 - pg_emf_reports.pdf
- Reports will be reviewed during the live demonstration and Case Study exercise in this workshop



This concludes the **EMFACT Overview**