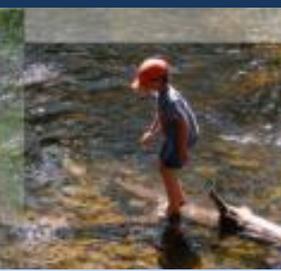




Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

Radius Search Tool for Point Source Emissions

August 9, 2012 SIPRAC Presentation
Bureau of Air Management - Technical Services
Presented by Michael Trahiotis



Connecticut Department of Energy and Environmental Protection

Background

- Allow Public to Generate Radius Search Output in a “Vanilla” Format
- Streamline Modeling Process
- Bridge Gap to Radius Search Functionality in EMIT Application



About

- Utilizes 2008 Inventory Data Set
- Built in MS Access
- Has Potential for use in a Broad Range of Projects
- Gives Maximum Flexibility to the User



Main Input Screen



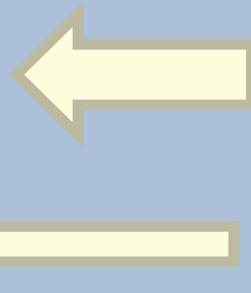
Connecticut DEEP Radius Search Tool for 2008 Air Emissions Inventory Data

Centroid UTMx

Centroid UTMy

Centroid UTM_Zone

Radius (km)



Centroid = Location in UTM Coordinates
UTMx (Easting)
UTMy (Northing)
UTM Zone (18 or 19 only)

Radius in Kilometers

Notes for the use of this Form

[Click for Documentation](#)

Input UTMx and UTMy in kilometers, with as many as four (4) places of precision. The database will report to the meter (3 places of precision).

Data Entry:

- Enter UTMx "Easting" as hundreds of Km (UTMx is XXX.XXXX)
- Enter UTMy "Northing" as thousands of Km (UTMy is XXXX.XXXX)
- UTM Zone must be 18 or 19
- Radius returns all points less than or equal to this value (Km)

Please be aware:

- The accuracy of the UTM data may be less than the indicated precision.
- Most of Connecticut is in Zone 18, and the default value for UTM Zone is "18".
- Any Zone 19 points in the database are converted to act as if they are in Zone 18.
- Any Zone 19 Centroid points are converted to act as if they are in Zone 18.

Please ask for technical assistance if you have questions about the inputs or the resulting output.



Main Input Screen



Connecticut DEEP Radius Search Tool for 2008 Air Emissions Inventory Data

Centroid UTMx

Centroid UTMy

Centroid UTM_Zone

Radius (km)

Notes for the use of this Form

Input UTMx and UTMy in kilometers, with as many as four (4) places of precision.
The database will report to the meter (3 places of precision).

Data Entry:

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- UTM Zone must be 18 or 19
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Please be aware:

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Please ask for technical assistance if you have questions about the inputs or the resulting output.

"Generate Radius Report"

This button generates two documents based on the user's input values:

Connecticut_DEEP_Radius_Results.xls
Connecticut_DEEP_Radius_Summary.pdf

Files are written to DESKTOP on a standard MS Windows PC

This button displays a help file with additional technical support and contact information



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MSExcel Output

- MSExcel 2000-2003 Format Workbook
- User can use all Excel sort/filter tools

Fields in Excel Output

Inventory Year	Startup Date	Allowable VOC
Data Year	Permit Issue Date	Actual VOC
Facility Name	Stack Number	Allowable NOx
Facility Town	Stack Height	Actual NOx
Facility Street	Stack Diameter	Allowable SOx
Description	Stack Temp	Actual SOx
TownCode	Stack Flow	Allowable PM10
PremCode	Stack Elevation	Actual PM10
FuncCode	Source UTMx	Allowable Pb
RegCode	Source UTMy	Actual Pb
	Source UTM_Zone	Allowable CO
	Distance from Centroid	Actual CO



MSExcel Output

- Two Key Areas for Sort and Filter Actions
 - “Distance from Centroid”
 - Allowable or Actual Emissions Fields
- Typical Workflow
 - Generate Max Required Radius (i.e 25km)
 - Duplicate Max Radius Worksheet
 - Sort and trim on “Distance from Centroid” (i.e 8.5km)
 - Sort on Emissions Field of Interest (i.e. Allowable SO_x)
 - Trim all Units Below Threshold (i.e 100tpy)



PDF Output

- Summary Report
- PDF Format
- Unit ID Data Only

Radius Search Summary Report											Radius (Km)	Centroid Coordinates: UTMx		UTMy
Distance from Centroid	Facility Name	Inventory Year	Data Year	Facility Town	Facility Street	Description	Permit Type	Permit Num.	Source UTMx	Source UTMy	Source UTM_Zone	25	692.97225	4626.1185
0.241	SNET	2008	1997	HARTFORD	55 TRUMBULL ST	SOLAR T1020S TURBINE	P	189	693.20009	4626.19714	18			
0.241	SNET	2008	1997	HARTFORD	55 TRUMBULL ST	SOLAR T1020S TURBINE	P	188	693.20009	4626.19714	18			
0.29	PEARL ST ASSOC	2008	1993	HARTFORD	100 PEARL ST	CAT 3508-TA DIESEL	P	74	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	106	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	101	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	102	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	103	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	105	693.20009	4626.29714	18			
0.29	SNET	2008	1993	HARTFORD	111 TRUMBULL ST	DETROIT DSEL 8163-740	P	104	693.20009	4626.29714	18			
0.307	CITY PLACE II	2008	1989	HARTFORD	185 ASYLUM ST	CUMMINS VTA28 DIES	P	82	693.10009	4626.39714	18			
0.307	GOODWIN SQUARE LLC	2008	1990	HARTFORD	225 ASYLUM ST	CUMMINS 38-GS1 DIESE	P	89	693.10009	4626.39714	18			
0.318	ALKON ELM STREET LLC	2008	2005	HARTFORD	55 ELM ST	BLR Y-S SPL54-300-N6 #	R	55	693.20009	4625.89714	18			
0.318	ALKON ELM STREET LLC	2008	2005	HARTFORD	55 ELM ST	BLR Y-S SPL54-300-N6 #	R	56	693.20009	4625.89714	18			
0.337	PRINCIPAL LIFE INS CO % S	2008	1990	HARTFORD	755 MAIN ST	CUMMINS KT2300-GS D	P	72	693.30009	4626.19713	18			
0.35	CONN DPW /XEROX CENTR	2008	1994	HARTFORD	25 SIGOURNEY ST	CUMMINS VTA-28-GSI	P	68	693.30009	4625.99713	18			
0.351	HORACE BUSHNELL MEMO	2008	1990	HARTFORD	166 CAPITOL AVE	BLR HB SMITH 4500-22	P	63	692.70009	4625.89717	18			
0.36	ST CENTRAL BANK % J ROB	2008	1983	HARTFORD	150 TRUMBULL ST	BLR FITZGIBBONS #2	R	309	693.20009	4626.39714	18			
0.36	CITY PLACE II	2008	1995	HARTFORD	185 ASYLUM ST	125KW EMERGEN GEN	P	145	693.20009	4626.39714	18			
0.36	FLEET BANK N.A.	2008	1990	EAST HARTFORD	99 FOUNDERS PLAZA	SOLAR SATURN GEI-SA	P	52	693.20009	4626.39714	18			
0.373	SHAWMUT BANK	2008	1995	HARTFORD	75 ASYLUM ST	DETROIT EMERG GEN	P	146	693.30009	4626.29713	18			
0.421	LIFE CAREER CENTER	2008	1990	HARTFORD	110 WASHINGTON ST	BLR BIGELOW #2	R	610	692.70009	4625.79717	18			
0.43	COHEN REAL ESTATE, SAM	2008	2005	HARTFORD	57 PRATT ST	BLR TITUSVILLE 336214-	R	381	693.30009	4626.39713	18			
0.484	NORTHLAND METRO CENT	2008	1990	HARTFORD	350 CHURCH ST	CAT 3412 DIESEL	P	70	692.90009	4626.59716	18			
0.509	CAP DIST ENERGY CTR COG	2008	2008	HARTFORD	490 CAPITOL AVE	DETROIT 12V-71-IT DIES	P	150	692.80009	4626.59716	18			
0.509	GSA PUBLIC BLDGS /HARTF	2008	1994	HARTFORD	135 HIGH ST	BLR C-B ???-150 #??	P	128	692.80009	4626.59716	18			
0.509	GSA PUBLIC BLDGS /HARTF	2008	1994	HARTFORD	135 HIGH ST	BLR C-B ???-150 #??	P	129	692.80009	4626.59716	18			

Thursday, August 02, 2012

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Available on DEEP Website

http://www.ct.gov/dep/cwp/view.asp?a=2684&q=461080&DEPNAV_GID=1997

DEP: Air Permitting Assistance - Windows Internet Explorer

http://www.ct.gov/dep/cwp/view.asp?a=2684&q=461080&DEPNAV_GID=1997

File Edit View Favorites Tools Help

Google Search More >>

DEP: Air Permitting Assistance

CT DEEP Air Permi
This interactive questionnaire will help you determine the permit applicability for a new air pollution emissions source by answering a series of questions related to that source. This questionnaire currently covers RCSA Sections 22a-174-3a, 3b, -3c and -42.
[Click to Start](#)

CTDEEP Air Permit Wizard (MS Excel)

CT BACT DATABASE
The CT BACT Database allows you to search all recent major source and minor source BACT determinations made in CT to aid in the preparation of a BACT Determination for an application.
[CT BACT Database](#) (.zip, MS Access 2007)

Connecticut DEEP Radius Search Tool (.zip, MS Access 2007)

The DEEP Air Inventory Radius Search Tool allows you to enter a geographic location ("centroid") in UTM format, and a radius in kilometers, and retrieve a list of inventoried point sources within that radius to aid in the preparation of a modeling analysis for an application.
[DEEP Air Inventory Radius Search Tool](#) (.zip, MS Access 2007)

CT DEEP Boiler Emissions Calculator
CTDEEP calculator for determining criteria pollutant and hazardous air pollutant emissions from boilers using AP-42 emission factors or manufacturer's data.
[CTDEEP Boiler Emissions Calculator](#) (MS Excel)

CO₂ Equivalents Calculator
CTDEEP calculator for calculating CO₂ equivalents for various greenhouse gases (GHGs) using their respective global warming potentials and the expected mass emission rate of those various GHGs from a source.
[CO₂ Equivalents Calculator](#) (MS Excel)



Connecticut Department of Energy and Environmental Protection

Questions?

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860-424-3536

Available on DEEP Website:

http://www.ct.gov/dep/cwp/view.asp?a=2684&q=461156&depNav_gid=1997

Or

http://www.ct.gov/dep/cwp/view.asp?a=2684&q=461080&depNav_GID=1997



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