A01- 0029

National Environmental Achievement Track

Application Form

Texas Instruments, Incorporated, Sensors & Controls
Name of facility

Texas Instruments, Incorporated
Name of parent company (if any)

34 Forest Street
Street address

MS 10-02
Street address (continued)

Attleboro, MA 02703
City/State/Zip code

Give us information about your contact person for the National Environmental Achievement Track Program.

Name Raymond P. Lizotte, Jr.

Title Senior Environmental Engineer

Phone 508-236-3016

Fax 508-236-3839

E-mail rlizotte@ti.com

Section A

Tell us about your facility.

Why do we need this information?

EPA needs background information on your facility to evaluate your application.

What do you need to do?

- Provide background information on your facilit
- Identify your environmental requirements.

1 What do you do or make at your facility?

Attleboro, MA is TI Sensors and Controls (S&C global headquarters. The Facility is a research and design center with manufacturing and global manufacturing support. TI-S&C produces sensor and control devices for industrial, commerical, HVAC, and automotive markets. S&C also designs and produces interconnection devices for microprocessor testing, telecom products, and RFID, TIRIS, devices for the identification and information recognizition markets.

2 List the Standard Industrial Classification (SIC) code(s) or North American Industrial Classification System (NAICS) codes that you use to classify business at your facility.

SIC
371x 3812 and 281x 369x and 367x

NAICS

3 Does your company meet the Small Business Administration definition of a small business for your sector?

☐ Yes ☒ No

4 How many employees (full-time equivalents) currently work at your facility?

☐ Fewer than 50

☐ 50-99

☐ 100-499

☐ 500-1,000

☒ More than 1,000

5 Does your facility have an EPA ID number(s)?

If yes, list in the right-hand column.

☒ Yes ☐ No

MAD 00732581
MA 0001791 (NPDES)
TRI ID 02703TXSNS34FOR

6 Identify the environmental requirements that apply to your facility. Use the Environmental Requirements Checklist, at the back of the instructions, as a reference. List your requirements to the right ***or*** enclose a completed Checklist with your application.

Checklist enclosed

7 Check the appropriate box in the right-hand column.

☐ I've listed the requirements above.

☒ I've enclosed the Checklist with my application.

8 Optional: Is there anything else you would like to tell us about your facility?

Since May 1995, the site has been a participant of the EPA Region 1 Environmental Leadership Program, StarTrack.

In the second half of 2000, TI-Materials and Controls (M&C) sold its engineered materials business at the Attleboro site. The divestiture included two buildings and 450 people. As part of the strategic direction of the business to focus on sensor and control devices, the name has changed to TI-Sensors and Controls (TI-S&C).

Section B

Tell us about your EMS.

Why do we need this information?

Facilities must have an operating Environmental Management System (EMS) that meets certain requirements.

What do you need to do?

- Confirm that your EMS meets the Achievement Track requirements.
- Tell us if you have completed a self-assessment or have had a third-party assessment of your EMS.

1 Check **yes** if your EMS meets the requirements for each element below as defined in the instructions.

a. Environmental policy ☒ Yes

b. Planning ☒ Yes

c. Implementation and operation ☒ Yes

d. Checking and corrective action ☒ Yes

e. Management review ☒ Yes

2 Have you completed at least one EMS cycle (plan-do-check-act)? ☒ Yes

3 Did this cycle include both an EMS and a compliance audit? ☒ Yes

4 Have you completed an objective self-assessment or third-party assessment of your EMS? ☒ Yes

If yes, what method of EMS assessment did you use?

☒ Self-assessment

☐ GEMI ☒ Other

☐ CEMP

☒ Third-party assessment

☐ ISO 14001 Certification

☒ Other Pursuant to StarTrack

Section C

Tell us about your past achievements and future commitments.

Why do we need this information?

Facilities must show that they are committed to improving their environmental performance. This mec that you can describe past achievements and will mc future commitments.

What do you need to do?

Refer to the Environmental Performance Table in the instructions to answer questions 1 and 2.

1 Describe your past achievements for at least two environmental aspects. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you qualify as a small facility as defined in the instructions, you are required to report past achievement for at least one environmental aspect.

First aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Hazardous and Non-hazardous Solid Waste Generation	4,120,000	lbs.	2,410,000 (annualized through Oct 2000)	lbs.

i. How is the current level an improvement over the previous level?

Less Generation of wasted by-products from site manufacuring operations resulting in a lower solid waste burdon to the community. NOTE: Production Activity 1998 to 2000: 0.95

ii. How did you achieve this improvement?

Lowering the waste generation rate of the manufacturing operations and increasing the site's rate of recycling by 10%

Second aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Use of Chlorinated Solvent Trichlorethylene	102,858	lbs	72,000 (aunnalized through Oct 2000)	lbs

i. How is the current level an improvement over the previous level?

This does not adequately demostrate the level of improvement since commencement of the TI Pollution Prevention Program. See attached file of improvements since 1990.

ii. How did you achieve this improvement?

Company wide Pollution Prevention Initiative to phase out the use of this hazardous material.

2 Select at least four environmental aspects (no more than two from any one category) from the Environmental Performance Table in the instructions and then tell us about your future commitments. If you need more space than is provided, attach copies of this section.

Note to small facilities: If you are a small facility, you are required to make commitments for at least two environmental aspects in two different categories.

First aspect you've selected

a. What is the aspect? Hazardous and Non-hazardous Solid Waste Generation

b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — 2,410,000/lbs. (Quantity/Units)

☐ Option B: In terms of units of production or output — (Quantity/Units)

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	1,480,000/lbs (15% annual reduction) (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
e. How will you achieve this improvement?	Continuation of existing process improvement programs designed to eliminate wasted resources and efforts to increase recycling rate by finding recycling options for generated waste or otherwise switching to recyclable materials.	

Second aspect you've selected

a. What is the aspect?	Energy Use	
b. Is this aspect identified as significant in your EMS?	☒ Yes ☐ No	
c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	536,014/mmBTU (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	509,000/mmBTU (5% reduction) (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
e. How will you achieve this improvement?	Continuation of existing program to implement energy conservation projects, improve existing combustion facilities, and install more energy efficient processes as process changes are ordered.	

Third aspect you've selected

a. What is the aspect?	Lead Electrical Connections	
b. Is this aspect identified as significant in your EMS?	☒ Yes ☐ No	
c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.	☐ Option A: Absolute value	(Quantity/Units)
	☒ Option B: In terms of units of production or output	75% of the soldered electrical connections use a lead-based solder. (Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☐ Option A: Absolute value	(Quantity/Units)
	☒ Option B: In terms of units of production or output	25% of the soldered connections using a lead-based solder (66% reduction). (Quantity/Units)
e. How will you achieve this improvement?	Continuation of existing program to develop a lead free electrical connection. TI is a participant in a Massachusetts consortium to develop lead-free materials, surface finishes, and manufacturing process for printed wiring boards and is looking to deploy lead-free electrical connection methods in new product startups in 2001.	

Fourth aspect you've selected

a. What is the aspect?	Supplier ESH Performance	
b. Is this aspect identified as significant in your EMS?	☒ Yes ☐ No	
c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	Unmeasured (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	100% of Supplier ESH performance evaluated (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)

e. How will you achieve this improvement?	Direct Questionaire, demonstration of ISO 14001 conformance/certification, direct contribution to TI ESH improvement program.

Fourth aspect you've selected

a. What is the aspect? — Solvent Free Manufacturing Processes

b. Is this aspect identified as significant in your EMS? — ☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — 77,922 Kg (Quantity/Units)

☐ Option B: In terms of units of production or output — (Quantity/Units)

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — 15,000 Kg (Quantity/Units)

☐ Option B: In terms of units of production or output — (Quantity/Units)

e. How will you achieve this improvement? — Develop new manufacturing techniques at the TI-Attleboro Technology Development Center and deploy those technology platforms to TI-S&C sites worldwide per the attached table.

YR2000 Status of Solvent Manufacturing within TI-S&C Worldwide

	Annualized YR1999			Annualized YR2002	
Site	**Kg**	**%**	**Site**	**Kg**	**%**
Attleboro	41,340	53%	Attleboro	900	6%
Mexico	8,580	11%	Mexico	8,000	53%
China	5,616	7%	China	4,000	27%
Versailles	5,460	7%	Versailles	0	0%
Malaysia	5,304	7%	Malaysia	0	0%
Japan	4,680	6%	Japan	0	0%
Almelo	3,315	4%	Almelo	350	2%
Korea	2,925	4%	Korea	350	2%
Brazil	702	1%	Brazil	700	5%
Hungary	0	0%	Hungary	700	5%
TOTAL	77,922		TOTAL	15,000	

Section D

Tell us about your public outreach and reporting.

Why do we need this information?

Facilities must demonstrate their commitment to public outreach and performance reporting. You should hav appropriate mechanisms in place to identify communi concerns, to communicate with the public, and to pro information on your environmental performance.

What do you need to do?

- Describe your approach to public outreach.
- List three references who are familiar with your facility.

1 How do you identify and respond to community concerns?

TI acts a good corproate citizen and has a good relationship in the Attleboro and Mansfield communities. The ESH department uses community outreach groups to foster relationships and uses the newspaper and internet to inform the public on environmental and public safety situations, concerns, and performance. We also welcome direct contact from the public and make information available on request,

2 How do you inform community members of important matters that affect them?

Information is available via a corporate annual report avilable online at www.ti.com and a TI-S&C specific environmental performance report, currently located at www.ti.com/mc.

TI S&C also utilizes the local newspaper to inform the general public on environmental issues related to the TI S&C Attleboro site.

3 How will you make the Achievement Track Annual Performance Report available to the public?

☒ Website www.ti.com

☐ Newspaper

☐ Open Houses

☒ Other

Available in CD-ROM media format

4 Are there any ongoing citizen suits against your facility? ☐ Yes ☒ No

If yes, describe briefly in the right-hand column.

5 List references below

	Organization	*Name*	*Phone number*
Representative of a Community/ Citizen Group	Massachusetts Audubon Society Oak Knoll Wildlife 1417 Park Street Attleboro, MA 02703	Emily Brunkhurst Director	(508)223-3060
State/Local Regulator	Conservation Commission/Planning Office 77 Park Street Attleboro, MA 02703	Ed Tanner Conservation Agent City of Attleboro	(508)223-2222
Other community/local reference	Superintendent's OfficeAttleboro Public Schools 100 Rathbun Willard Drive Attleboro, MA 02703	Dr. Ronald Pacey Attleboro Superintendent of Schools	(508)222-0012

Section E

Application and Participation Statement

On behalf of TI-S&C Attleboro

I certify that

- I have read and agree to the terms and conditions, as specified in the *National Environmental Achievement Track Program Description* and in the *Application Instructions*;
- I have personally examined and am familiar with the information contained in this Application (including, if attached, the Environmental Requirements Checklist). The information contained in this Application is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete, and I have no reason to believe the facility would not meet all program requirements;
- My facility has an environmental management system (EMS), as defined in the Achievement Track EMS requirements, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements, and the facility has corrected all identified instances of potential or actual noncompliance;
- Based on the foregoing compliance assessment and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

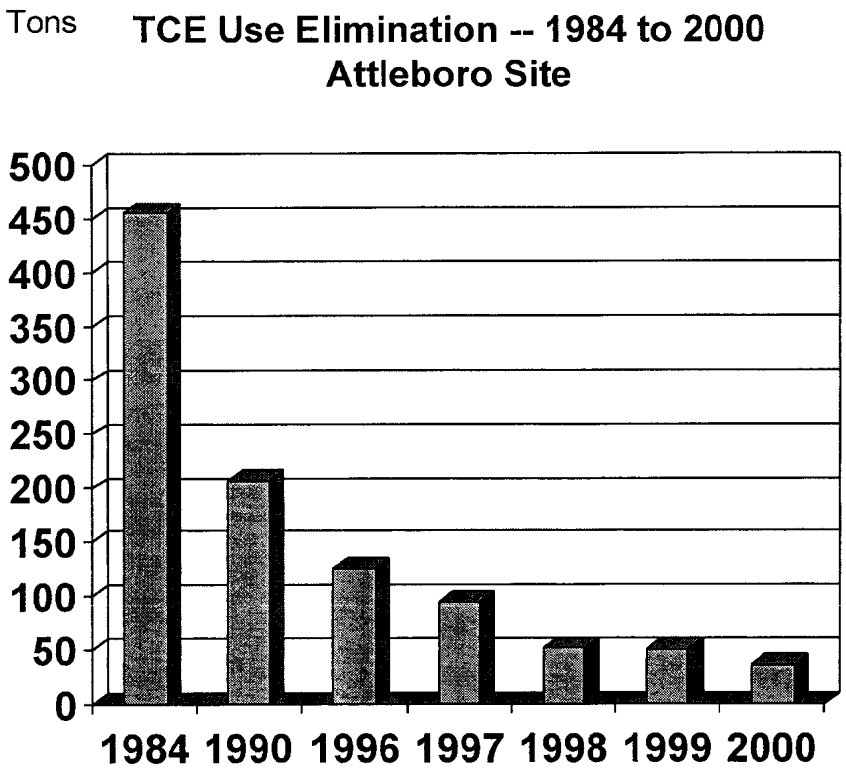
I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Achievement Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior facility manager and fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is applying to this program.

Signature/Date	Francis J. Veale Nov 7, 00
Printed Name/Title	Francis J. Veale, Jr., Esq. Environmental Safety and Health Manager
Facility Name	Texas Instruments, Incorporated Sensors & Controls
Facility Street Address	34 Forest Street, MS 10-02 Attleboro, MA 02703
Facility ID Numbers	A01-0029, MAD 00732581, MA 0001791, TRI ID 02703TXSNS34FOR

Solvent Reduction Program Update

Summary of TCE Elimination Progress



- Progress from 1984 to 1990 achieved via Aqueous Washers, Oil-free Disc Manufacturing and eliminating unnecessary cleaning operations.
- Progress from 1990 to 1995 achieved via continuation of Oil-free Disc Manufacturing and Process Changes.
- Progress from 1995 onward will be achieved via High Vacuum Vapor Degreasing, Non-Aqueous Strip Cleaning, continuation of Oil-free Disc Manufacturing and further process changes.

National Environmental Achievement Track

Environmental Requirements Checklist

The following Checklist is provided to assist facilities in answering Section A, "Tell us about your facility," Question 6. The Checklist is given to help facilities identify the major federal, state, tribal, and local environmental requirements applicable at their facilities. The Checklist is not intended to be an exhaustive list of all environmental requirements that may be applicable at an individual facility.

If you use this Checklist and choose to submit it with your application, fill in your facility information below and enclose the completed Checklist with your application (see instructions).

Facility Name	Texas Instruments Inc.
Facility Location:	Attleboro, MA 02703
Facility ID Number(s):	MAD 00732581
(attach additional sheets	MA 0001791 (NPDES)
if necessary)	TRI ID 02703TXSNS34FOR

Air Pollution Regulations	Check All That Apply
1. National Emission Standards for Hazardous Air Pollutants (40 CFR 61)	☒
2. Permits and Registration of Air Pollution Sources	☒
3. General Emission Standards, Prohibitions and Restrictions	☒
4. Control of Incinerators	☐
5. Process Industry Emission Standards	☐
6. Control of Fuel Burning Equipment	☒
7. Control of VOCs	☒
8. Sampling, Testing and Reporting	☒
9. Visible Emissions Standards	☒
10. Control of Fugitive Dust	☐
11. Toxic Air Pollutants Control	☒
12. Vehicle Emissions Inspections and Testing	☐
Other Federal, State, Tribal or Local Air Pollution Regulations Not Listed Above (identify)	
13. Halogenated Sovlent Cleaning Machine MACT, 40 CFR 63, Subpart T	☒
14. 60 CFR Part 60, "Standards of Performance for New Stationary Sources: Small Industrial-Commercial-Institutional Steam Generating Units	☒

Hazardous Waste Management Regulations	
1. Identification and Listing of Hazardous Waste (40 CFR 261)	
- Characteristic Waste	☒
- Listed Waste	☒

2. Standards Applicable to Generators of Hazardous Waste (40 CFR 262)
   - Manifesting ☒
   - Pre-transport requirements ☒
   - Record keeping/reporting ☒
3. Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)
   - Transfer facility requirements ☐
   - Manifest system and record-keeping ☐
   - Hazardous waste discharges ☐
4. Standards for Owners and Operators of TSD Facilities (40 CFR 264)
   - General facility standards ☐
   - Preparedness and prevention ☐
   - Contingency plan and emergency procedures ☐
   - Manifest system, Record keeping and reporting ☐
   - Groundwater protection ☐
   - Financial requirements ☐
   - Use and management of containers ☐
   - Tanks ☐
   - Waste piles ☐
   - Land treatment ☐
   - Incinerators ☐
5. Interim Status Standards for TSD Owners and Operators (40 CFR 265) ☐
6. Interim Standards for Owners and Operators of New Hazardous Waste Land Disposal Facilities (40 CFR 267) ☐
7. Administered Permit Program (Part B) (40 CFR 270) ☐

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (identify)

8. ☐
9. ☐

Hazardous Materials Management

1. Control of Pollution by Oil and Hazardous Substances (33 CFR 153) ☒
2. Designation of Reportable Quantities and Notification of Hazardous Materials Spill (40 CFR 302) ☒
3. Hazardous Materials Transportation Regulations (49 CFR 172-173) ☐
4. Worker Right-to-Know Regulations (29 CFR 1910.1200) ☒
5. Community Right-to-Know Regulations (40 CFR 350-372) ☒

Other Federal, State, Tribal or Local Hazardous Materials Management Regulations Not Listed Above (identify)

6. ☐
7. ☐

Solid Waste Management

1. Criteria for Classification of Solid Waste Disposal Facilities and Practices (40 CFR 257) ☐

2. Permit Requirements for Solid Waste Disposal Facilities ☐
3. Installation of Systems of Refuse Disposal ☐
4. Solid Waste Storage and Removal Requirements ☐
5. Disposal Requirements for Special Wastes ☐

Other Federal, State, Tribal or Local Solid Waste Management Regulations Not Listed Above (identify)

6. ☐
7. ☐

Water Pollution Control Requirements

1. Oil Spill Prevention Control and Countermeasures (SPCC) (40 CFR 112) ☒
2. Designation of Hazardous Substances (40 CFR 116) ☒
3. Determination of Reportable Quantities for Hazardous Substances (40 CFR 117) ☒
4. NPDES Permit Requirements (40 CFR 122) ☒
5. Toxic Pollutant Effluent Standards (40 CFR 129) ☒
6. General Pretreatment Regulations for Existing and New Sources (40 CFR 403) ☒
7. Organic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 414) ☐
8. Inorganic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 415) ☐
9. Plastics and Synthetics Point Source Effluent Guidelines and Standards (40 CFR 416) ☐
10. Water Quality Standards ☒
11. Effluent Limitations for Direct Dischargers ☒
12. Permit Monitoring/Reporting Requirements ☒
13. Classifications and Certifications of Operators and Superintendents of Industrial Wastewater Plants ☒
14. Collection, Handling, Processing of Sewage Sludge ☐
15. Oil Discharge Containment, Control and Cleanup ☒
16. Standards Applicable to Indirect Discharges (Pretreatment) ☒

Other Federal, State, Tribal or Local Water Pollution Control Regulations Not Listed Above (identify)

17. ☐
18. ☐

Drinking Water Regulations

1. Underground Injection and Control Regulations, Crieria and Standards (40 CFR 144, 146) ☐
2. National Primary Drinking Water Standards (40 CFR 141) ☐
3. Community Water Systems, Monitoring and Reporting Requirements (40 CFR 141) ☐

4. Permit Requirements for Appropriation/Use of Water from Surface or Subsurface Sources ☒
5. Underground Injection Control Requirements ☐
6. Monitoring, Reporting and Record keeping Requirements for Community Water Systems ☐

Other Federal, State, Tribal or Local Drinking Water Regulations Not Listed Above(identify)

7. ☐
8. ☐

Toxic Substances

1. Manufacture and Import of Chemicals, Record keeping and Reporting Requirements (40 CFR 704) ☒
2. Import and Export of Chemicals (40 CFR 707) ☐
3. Chemical Substances Inventory Reporting Requirements (40 CFR 710) ☒
4. Chemical Information Rules (40 CFR 712) ☐
5. Health and Safety Data Reporting (40 CFR 716) ☐
6. Pre-Manufacture Notifications (40 CFR 720) ☒
7. PCB Distribution Use, Storage and Disposal (40 CFR 761) ☒
8. Regulations on Use of Fully Halogenated Chlorofluoroalkanes (40 CFR 762) ☐
9. Storage and Disposal of Waste Material Containing TCDD (40 CFR 775) ☐

Other Federal, State, Tribal or Local Toxic Substances Regulations Not Listed Above (identify)

10. ☐
11. ☐

Pesticide Regulations

1. FIFRA Pesticide Use Classification (40 CFR 162) ☒
2. Procedures for Disposal and Storage of Pesticides and Containers (40 CFR 165) ☐
3. Certification of Pesticide Applications (40 CFR 171) ☐
4. Pesticide Licensing Requirements ☒
5. Labeling of Pesticides ☐
6. Pesticide Sales, Permits, Records, Application and Disposal Requirements ☐
7. Disposal of Pesticide Containers ☐
8. Restricted Use and Prohibited Pesticides ☐

Other Federal, State, Tribal or Local Pesticides Regulations Not Listed Above (identify)

9. ☐
10. ☐

Environmental Clean-Up, Restoration, Corrective Action

1. Comprehensive Environmental Response, Compensation and Liability Act (Superfund) (identify)
   (Active) Shpack Landfill Superfund Site, Norton, MA ☒ ☐

2. RCRA Corrective Action (identify)
   NA ☐ ☐

Other Federal, State, Tribal or Local Environmental Clean-Up, Restoration, Corrective Action Regulations Not Listed Above (identify)

3. Texas Instruments, Attleboro, MA Site under MCP, 310 CMR 40.000 ☒
4. Former Texas Instruments, Central Lake, MI Site ☒