

PLEDGE Technical Data Checklist

The following information must be included in an air permit to install (PTI) application with a Promoting Leadership in Environmental Decision-making to Grow our Economy (PLEDGE) designation. All spreadsheets, including equations, shall be submitted electronically as well as in hard copy format. Based on the specific project, additional information may be required.

Cover Letter

A cover letter must accompany the application. The cover letter should include:

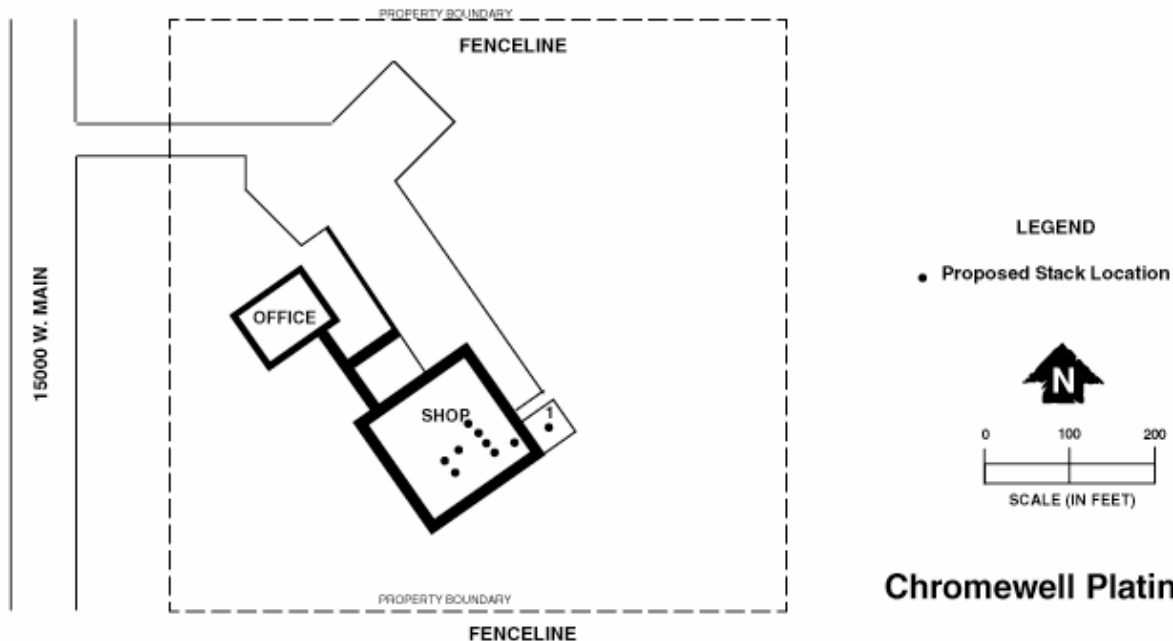
- a statement of the purpose for the application
- a brief description of the project being undertaken
- a brief history of the facility that includes anything that will help the PLEDGE project review team understand the facility
- a description of the process, or processes, being affected by the proposed project

Site Map

A scaled site map must be included with the application and should show:

- all property boundary line locations
- fences or barriers that preclude public access
- location of the buildings on and near the site
- stack locations on or near the buildings

A sample site map is provided below:



Chromewell Plating, Inc.

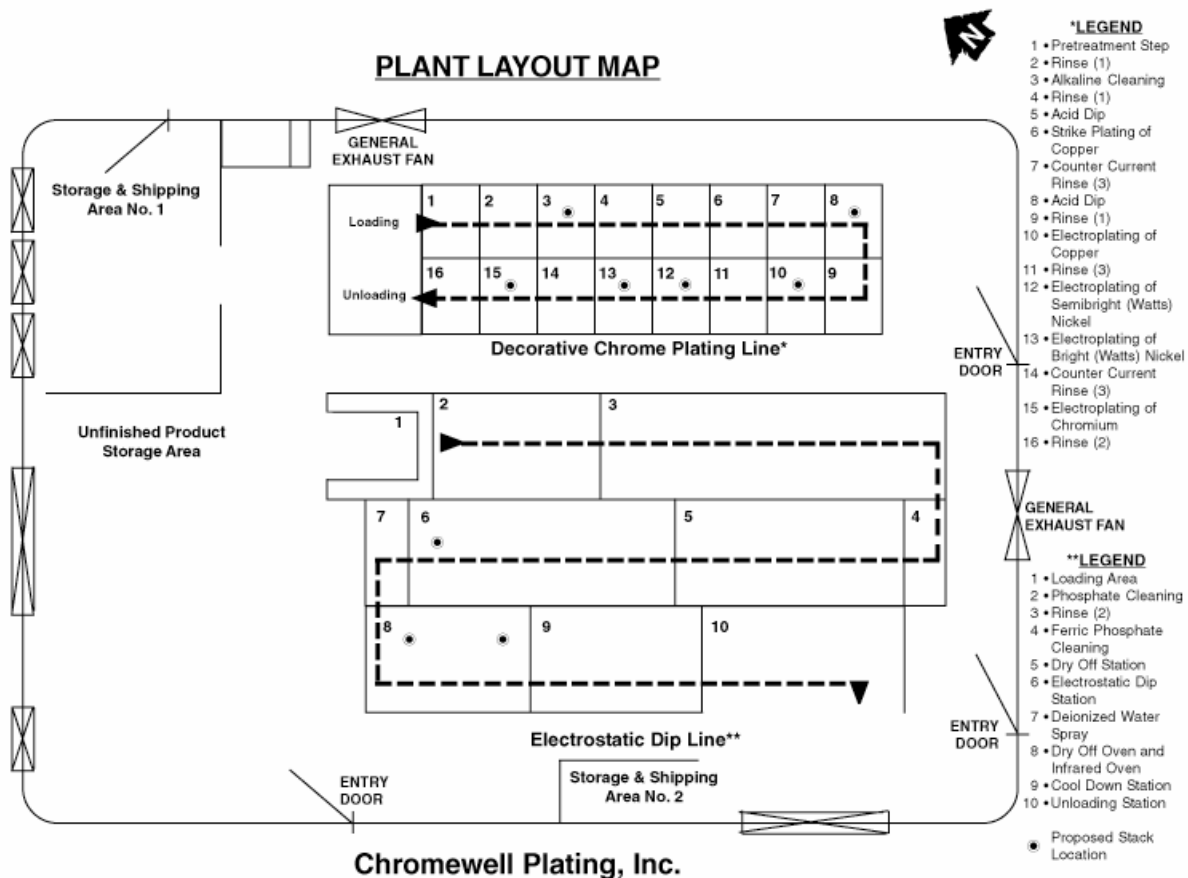
Plant/Process Layout Map

A plant/process layout map must be included with the application. The plant layout map should show:

- the relative location of each emission unit in the facility
- an exhaust flow diagram
- a product flow diagram
- a side view (elevation) drawing of the building

Detailed drawings are helpful; block diagrams are acceptable.

A sample plant layout map is provided below:



Emission Unit Descriptions

Each emission unit must be described. The description must include:

- a unique identifier (e.g., EU-BOILER1)
- size, type, make, and model (if known) of each process device and control device
- type and feed rate of each raw material, intermediate product, and final product
- feed or production rates listed in pounds per hour or similar units of measure

Exhaust Stack Parameters

The PTI application must include a complete description of each exhaust stack, or vent, from which each emission unit releases air contaminants to the outdoor air. The required exhaust stack parameters include:

- a unique stack identifier or name (e.g., SV-BOILER1)

- an association between each stack and each emission unit (or portion of an emission unit)
- the height of the stack/vent above ground level at the discharge point
- the internal diameter or dimensions of the stack/vent at the discharge point
- the orientation of the stack/vent discharge (i.e., vertical, horizontal, etc.)
- the volume flow rate of the exhaust gas in cubic feet per minute (CFM) and note whether the flow rate is based on actual or standard CFM
- the approximate temperature of the exhaust gas at the discharge point
- a description of any rain protection devices

Emission Calculations

The emissions of all regulated air contaminants from each emission unit identified in the application must be quantified. For each air contaminant emitted, the application must provide calculations that show the following:

- potential emissions in pounds per hour and tons per year, before and after control
- proposed maximum allowable emissions in tons per year, before and after control
- projected actual emissions in tons per year after control

Emissions must be associated with the exhaust stack from which they will be released to the outdoor air.

Regulatory Discussion/Applicability Determinations

- Identify the applicable state and federal air quality regulations
- Demonstrate how the facility will comply with the regulations

Control Technology Evaluations

- For applications subject to the federal Prevention of Significant Deterioration (PSD) regulations, a top-down Best Available Control Technology (BACT) analysis must be performed. BACT is required under PSD for each pollutant emitted at greater than the pollutant-specific significant emission threshold.
- For applications subject to the major offset requirements (Rule 220), a Lowest Achievable Emission Rate (LAER) determination must be made. LAER is required under Rule 220 for each non-attainment pollutant emitted at greater than the pollutant-specific significant emission threshold.
- For applications subject to Rule 702, a BACT analysis is required for each source of Volatile Organic Compound (VOC) emissions. This requirement applies independent of PSD BACT requirements. PSD BACT will subsume Rule 702.
- For applications subject to the Best Available Control Technology for Air Toxics requirements in Rule 224, a control technology analysis for each subject toxic air contaminant (TAC) must be performed.

Off-Site Impacts

Include any necessary air quality modeling demonstrations. For information regarding modeling procedures, meteorological data, or submittal requirements, contact the PLEDGE Team Leader.