Risk Assessment Form (3)

Must be completed before experimentation.

Student's	Name	(2)

Madeline Competello

Title of Project

The Use of 51 TITAN Model 600/800 GeoExploration Check X-Ray Gun in Analyzing Pb, Cr,

Zn, As, Cu, and Cd Concentrations in Long Island Elementary Schools and Public Parks's Soil

To be completed by the Student Researcher(s) in collaboration with Designated Supervisor/Qualified Scientist: (All questions must be answered; additional page(s) may be attached.)

 List all hazardous chemicals, activities, or devices that will be used; identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules).

Bruker Spectro Titan S1 X-Ray Fluorescence

- Identify and assess the risks involved in this project. Equipment from (1) generates x-rays
- Describe the safety precautions and procedures that will be used to reduce the risks.
 Unit is designed with built-in safety measures, such as a proximity sensor, to keep users safe. Unit is designed so that x-rays do not stray out from sample holder.
- Describe the disposal procedures that will be used (when applicable).
 As a precaution, a radiation monitor was placed next to the unit when in use. Normal background radiation was not affected while unit was in use.
- 5. List the source(s) of safety information.

Spectro S1 Titan documentation via Bruker (manufacturer).

	Supervisor (or Qualified Scientist, when applicable): d procedures described above. I certify that I have reviewed the
	9 NaQ 06/26/2019
Designated Supervisor's Printed Name Signature	Date of Review (mm/dd/yy)
Chair, NYIT	dnadler@nyit.edu
Position & Institution	Phone or email contact information
20 years in environmental sampling, analysis a	and research
Experience/Training as relates to the student's area of	f research