Appendix F: Ethical Considerations

Introduction

Our team is creating a product designed to empower people who feel vulnerable or unsafe in their daily lives, ultimately by aiding their ability to defend themselves. Our goal is to provide a tool that offers safety and confidence while remaining socially and legally acceptable in the eyes of the user and those around them. This appendix reflects key ethical frameworks, including the NSPE Code of Ethics and the DTC practices. Our considerations are organized into five categories: development, manufacturing, user impact, social impact, and end of life.

Development

The development phase will prioritize user safety, empowerment, and responsible functionality.

- 1. We will design a product meant solely for defensive use, avoiding features that encourage aggression or misuse.
- 2. We will perform risk assessments and testing to ensure accidental activation or unintended harm is minimized.
- 3. We will incorporate educational materials that clearly instruct users on responsible and safe usage.

Manufacturing

We are committed to ethical and sustainable manufacturing.

- 1. Where possible, we will source materials domestically or from partners that meet environmental and labor standards.
- 2. We will design for compactness and minimal material use to reduce waste and cost.

User Impact

User wellbeing and inclusivity are central to our product's design.

- 1. The product will be safe and simple to use under stress, minimizing the chance of user error or self-injury.
- 2. It will be tested across a range of user demographics (e.g., age, physical ability) to ensure it is usable for everyone.
- 3. Educational materials will be made available in multiple languages to increase accessibility.
- 4. We will ensure the product does not discriminate in design or marketing based on gender, race, or physical ability.

Social Impact

We are aware of the broader societal implications of self-defense products.

- 1. Our product will be clearly marketed and labeled as a non-lethal, last-resort defense option.
- 2. Our product will be designed with de-escalating the situation in mind; avoiding the conflict is always the safest option.
- 3. We will address any concerns raised by the public through reflecting such feedback in our design iterations.

End of Life

We aim to design with long-term responsibility in mind.

- 1. We will select durable materials to extend product lifespan and minimize unnecessary replacement.
- 2. Our design should also be durable in order to ensure its reliability, as design failure could have serious consequences for the user.
- 3. We will create mechanisms to recycle or reuse parts of designs to reduce environmental footprint and increase user satisfaction.

Conclusion

Overall, we will ensure that our product is a self-defense tool only, and we will take as many measures as possible to prevent our product from being used for malicious intent. We are committed to making our design accessible for all, and instilling confidence in the user no matter their background. This appendix outlines our commitment to designing a product that is responsible, inclusive, and beneficial to both users and the community.