

# **Detailed Program Description**

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GreenScreen<sup>®</sup> for Safer Chemicals (GreenScreen<sup>®</sup>) is a method for chemical hazard assessment and benchmarking that supports the identification of chemicals of concern and safer alternatives. It was developed by the non-profit organization Clean Production Action to help identify chemicals for use in materials and products that are safe and healthy throughout their life cycles.

The Authorized GreenScreen Practitioner Program<sup>®</sup> is designed for individuals who are interested in receiving in-depth training and developing expertise in performing high quality GreenScreen Assessments. This document will assist you in understanding the breadth and scope of the program, the time commitment involved to become an Authorized GreenScreen<sup>®</sup> Practitioner, the benefits to you and your organization and the steps for credential renewal.

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#### **BENEFITS**

This training program offers technical professionals – product designers, engineers, toxicologists, environmental health and safety experts, chemists, etc. – a unique opportunity to strengthen their professional portfolio while simultaneously helping their companies lead the way through the design of products and production processes that are safer for humans and the environment. As the need for alternatives assessment increases globally, in-house expertise in applying chemical hazard assessments will be an important measure of success and competitive advantage in this field.

#### Benefits of becoming an Authorized GreenScreen Practitioner:

- ✓ Increased competitive advantage with professional credentialing
- Experience developing robust hazard assessments used in alternatives assessment, risk assessments, and Safety Data Sheets
- ✓ Licensed to author assessments for his/her registered organization
- Licensed to submit Authorized assessments for third party review resulting in Certified assessments
- ✓ Recognition on the Clean Production Action website

#### Benefits for Organizations with Authorized GreenScreen Practitioners:

- ✓ <u>Reduce costs</u>: Increase efficiencies by using internal experts to generate valuable authorized chemical hazard assessments
- ✓ <u>Increase sales</u>: Meet customer needs for chemical hazard assessments in support of:
  - Materials procurement requirements
  - Environmentally preferable product development
  - Alternatives assessments
  - o Achieving sustainability standards and ecolabel requirements
- ✓ <u>Reduce risk</u>:
  - Clearly communicate and achieve internal safer chemistry product development targets
  - Leverage Clean Production Action third party review of Authorized assessments for high impact decisions

### REQUIREMENTS

#### **PREREQUISITES:**

- 1. Completion of a GreenScreen Standard Introductory Course<sup>1</sup>
- 2. Ability to perform a literature search to find relevant toxicological and environmental data on a chemical of interest
- 3. Familiarity with toxicological test methods
- 4. Familiarity with reviewing and summarizing toxicological studies
- 5. Familiarity with understanding a chemical's environmental fate and transport
- 6. Ability to assign hazard classifications to appropriate hazard endpoints
- 7. Ability to perform classifications of chemicals of interest using the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

#### **PREFERRED:**

Experience using estimation to fill missing measured toxicological data, including identifying suitable chemical analogs and using appropriate models

<sup>&</sup>lt;sup>1</sup> Individuals who meet all the remaining requirements and have not yet completed the GreenScreen Standard Introductory Course will be able to do so through an online version of this training. Once accepted into the program, Clean Production Action will ensure you obtain access to the online course in order to meet the prerequisite.

### **COURSE CONTENT**

There are two parts to the Authorized GreenScreen Practitioner Program – the Advanced Topics Course and the Practicum. Both are required for licensing.

#### 1. Advanced Topics Course: March – May, 2023

- Sessions are live webinar format with screen sharing and voice conferencing.
  - One, one-hour orientation session and one, one-hour closure session
  - Eight, one and one-half hour classes, held once a week
  - Classes recorded and made available if a participant has a critical conflict<sup>2</sup>
- Reading and Homework between classes.
  - The time to complete homework depends on your experience and desired depth of mastery.
  - Expect to spend approximately 1.0 2.0 hours per week outside of class on homework.
- Final exam
- The expected time commitment for the course is approximately 25-40 hours.

#### 2. The Practicum: May – November, 2023

- Sessions are live webinar format with screen sharing and voice conferencing.
  - Six live, one-hour, web-based work sessions are provided to answer questions and discuss topics requested by participants
  - One, one-hour closure session.
- Homework between sessions.
  - Each participant will perform one comprehensive GreenScreen assessments on a chemical of your choice.<sup>3</sup>
  - Your assessment is carefully reviewed, with detailed feedback provided by our expert toxicologist and trainers.

<sup>&</sup>lt;sup>2</sup> At the instructor's discretion, up to two classes may be attended via recording if critical schedule conflicts arise. Prior approval is required. Additional requirements will apply.

<sup>&</sup>lt;sup>3</sup> Selection of chemicals that lack available toxicological and environmental data is discouraged since it reduces the learning experience. At a minimum, selected chemicals must have sufficient available data to assign hazard levels to the GreenScreen Group I Human Health Endpoints of Carcinogenicity, Mutagenicity, Reproductive Toxicity and Developmental Toxicity. CPA can provide a list of suggested assessment chemicals to students if needed.

- The time to complete the homework is highly dependent on your prior experience and expertise. Expect to spend approximately 3 – 6 hours per week outside of class.
- The expected time commitment for the Practicum is approximately 45-85 hours. More time may be required for students without prior experience in toxicology and/or chemical hazard assessment.

### **ADVANCED TOPICS COURSE DETAILS**

Date (2023)	Time (US PT)	Duration (hrs)	Topics	
14-Mar	8:00 AM	1	Program Orientation	
			Assessing & Classifying Hazards	
21-Mar	8:00 AM	1.5	Hazard Assessment - Data Sources and Data Preference	
			Carcinogenicity, Mutagenicity	
		1.5	Hazard Assessment - Data Interpretation	
28-Mar	8:00 AM		Reproductive Toxicity	
			Developmental Toxicity	
			Endocrine Activity	
	8:00 AM	M 1.5	Hazard Assessment - Data Reporting	
			Introduce Group II Human Health Endpoints	
4-Apr			Acute Mammalian Toxicity	
			Systemic Toxicity-Organ Effects	
			Neurotoxicity	
	8:00 AM	1.5	Skin Sensitization	
11-Apr			Respiratory Sensitization	
тт-Арі			Skin Irritation	
			Eye Irritation	
18-Apr	8:00 AM		8:00 AM 1.5	Acute and Chronic Aquatic Toxicity
10-Abi		1.5	Persistence and Bioaccumulation	
25-Apr	8:00 AM	1.5	Reactivity and Flammability	
23-Api	0.00 AM	1.5	Estimation: Analogs and Models	
2-May	8:00 AM	0 AM 1.5	Benchmarking with Data Gaps	
Z-IVIdy			Environmental Transformation Products	
9-May	8:00 AM	0 AM 1.5		
Jividy	0.00 AM		Benchmarking Mixtures and Polymers	
16- May	8:00 AM	1	Transition and Closure	

Note: Class times subject to change to accommodate time zones of registered students.

#### **PRACTICUM DETAILS**

Each participant will perform one full GreenScreen Assessment as his or her practicum requirement. This is the most time-consuming part of the course and requires a serious commitment.

The practicum assignment is completed in sections, and the sections correspond to hazard endpoint groupings in the method.

- Group I Human Health Endpoints
- Group II Human Health Endpoints
- Environmental Toxicity, Fate, and Physical Properties

CPA toxicologist(s) will review homework between sessions and provide feedback to participants prior to the next session. The six live working sessions held during the practicum period provide an opportunity for participants to ask questions and to discuss topics of interest. Students may submit questions to CPA staff at any time through an online platform.

The practicum assignments must be satisfactorily completed in order for participants to pass the course. Clean Production's consulting toxicologist reviews each assessment for quality and completeness.

Date (2023)	Time (USA Pacific)	Duration (hours)	Event	
16-May	8:00 AM	N/A	Chemicals Assigned	
6-Jun	8:00 AM	1	Q&A #1	
13-Jun	8:00 AM	N/A	Homework #1 (C, M, R, D, E) Due	
23-Jun	N/A	N/A Homework # 1 Feedback Expected		
27-Jun	8:00 AM	Q&A #2		
11-Jul	8:00 AM	N/A	N/A Homework #2 (AT, ST, N, SnS, SnR) Due	
21-Jul	N/A	N/A	A Homework # 2 Feedback Expected	
25-Jul	8:00 AM	1	1 Q&A #3	
1-Aug	8:00 AM	N/A Homework #3 (IrS, IrE, AA, CA, P, B) Due		
11-Aug	N/A	N/A Homework #3 Feedback Expected		
15-Aug	8:00 AM	1 Q&A #4		
22-Aug	8:00 AM	N/A	Homework #4 (Rest of assessment) Due	
1-Sep	N/A	N/A	/A Homework #4 Feedback Expected	
5-Sep	8:00 AM	1	Q&A #5	
12-Sep	11:59 PM	N/A	Homework #5 (Revised Assessment) Due	
26-Sep	N/A	N/A	Homework #5 Feedback Expected	
3-Oct		1	Q&A #6	
17-Oct	11:59 PM	N/A	Homework #6 (Final Assessment) Due	
27-Oct	N/A	N/A	Homework #6 Feedback Expected	
27-Oct	N/A	N/A	Pass or Fail Expected	
31-Oct	8:00 AM	1	Closure	

#### **PRACTICUM SCHEDULE**

Note: Class times subject to change to accommodate time zones of accepted students.

### LICENSING

#### **Requirements:**

- Successfully complete Advanced Topics course (including written exam)
- Successfully complete Practicum
- Sign CPA GreenScreen<sup>®</sup> Licensing Agreement

Please note that participation in the Authorized Practitioner Program does not ensure participant licensing. Participants must show an acceptable level of competency in using the GreenScreen method. CPA reserves the right to deny licensing to those who do not achieve desired competency.

#### **Once Licensed, Authorized GreenScreen Practitioners May:**

- Provide GreenScreen Assessments for their registered organization. Authorized GreenScreen Practitioners are *not* licensed to provide assessments or any other GreenScreen services to other organizations.
- Keep their licensed status even if they change organizations. Licensing is assigned to an individual, not to an organization.
- Submit GreenScreen Assessments for certification through the GreenScreen Certification Process.
- Identify themselves publicly as Authorized GreenScreen Practitioners.
- Audit future online Advanced Topics Courses (if space allows, and at instructor discretion).

The names and organizational affiliations of Authorized GreenScreen Practitioners will be posted and maintained on the CPA website. Authorized GreenScreen Practitioners shall promptly notify CPA of changes to their organizational affiliates. The new entity must be approved by, and registered with, CPA as the Authorized GreenScreen Practitioner's Registered Entity as a precondition to the Authorized GreenScreen Practitioner's ability to generate Authorized Assessments and submit Assessments for certification and/or verification.

### **PROGRAM OPTIONS & PRICING**

Program Options:

There are two ways to complete the Practitioner Program:

- 1) The Advanced Topics Course and Practicum can be taken *concurrently* (within the same cohort).
- 2) The Advanced Topics Course and Practicum can be taken *sequentially*.
  - The Advanced Topics Course must be taken first.
  - The Practicum must be completed within two years of the completion of the Advanced Topics Course.

Students must successfully complete (PASS) the Advanced Topics Course and Practicum within the specified timeframe and sign a License Agreement to become an Authorized GreenScreen Practitioner.

#### Pricing:

### **GreenScreen Advanced Training Pricing 2021<sup>4</sup>**

GreenScreen Advanced Topics Course	\$3,450.00 USD
GreenScreen Practicum	\$4,600.00 USD
Authorized GreenScreen Practitioner Program	\$6,900.00 USD

<sup>&</sup>lt;sup>4</sup> Clean Production Action reserves the right to update pricing at their discretion. A student who chooses to take the program elements sequentially is subject to the price of the Practicum at the time the student participates in the Practicum.

### LICENSING RENEWAL

Frequency: Every three years

Requirements:

- Complete three continuing education credits to stay abreast of any revisions to the method or program that have occurred during the three-year certification period. Classes will be offered via live webinar. Additional fees may apply.
- Frequency, requirements and fees may be revised at any time.

### AUTHORIZED GREENSCREEN PRACTITIONER® PROGRAM PROGRAM ACKNOWLEDGEMENT

#### 1. Purpose

Clean Production Action (CPA) teaches and licenses individuals in the use of GreenScreen<sup>®</sup> for Safer Chemicals (GreenScreen<sup>®</sup>), a method for chemical hazard assessment and benchmarking that supports the identification of chemicals of concern and safer alternatives. In the Authorized Practitioner Program, individuals are given advanced training in the GreenScreen method, become eligible to be licensed to provide GreenScreen Assessment services to their registered organization<sup>5</sup> and may submit their GreenScreen Assessments to the GreenScreen Certification Process for their organization.

#### 2. Registration and Payment

Registrants agree to pay CPA in accordance with the terms described herein. Fees must be paid in full by the start of the course. CPA maintains a no cancellation/no refund policy. However, we acknowledge that extenuating circumstances arise. Students may request that their deposit and/or entire fee be applied to secure placement in a future course. These requests will be considered on a case-by-case basis. CPA reserves the right to cancel the course due to low enrollment. If the course were to be cancelled, students would receive a full refund.

#### 3. Licensing

Each participant who successfully completes the Practitioner Program will be eligible to be licensed as an Authorized GreenScreen Practitioner. To become licensed, participants must:

- Successfully complete Advanced Topics course (including written exam)
- o Successfully complete Practicum
- Sign Clean Production Action's non-negotiable Licensing Agreement<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> A registered organization is the organization with which the licensed practitioner is affiliated. One registered organization per practitioner. A change in registered organization is subject to approval by CPA and its applicable rules and regulations.

<sup>&</sup>lt;sup>6</sup> The Authorized GreenScreen Practitioner is a credential that applies to the individual and not the organization. For that reason, the license agreement is signed between the individual and Clean Production Action.

 Comply with all other Authorized GreenScreen Practitioner Program requirements

Please note that participation in the Authorized GreenScreen Practitioner Program does not ensure participant licensing. Participants must show acceptable levels of competency using the GreenScreen method. CPA reserves the right to deny licensing to those who do not achieve CPA approved levels of competency.

Licensing is further conditioned upon the participant entering into a license agreement that governs the participant's rights and responsibilities as an Authorized GreenScreen Practitioner and the terms and conditions for use of select GreenScreen trademarks. The terms of the license agreement are nonnegotiable and are between CPA and the individual student, *not* between CPA and the student's registered organization.

Once licensing is achieved, the Authorized GreenScreen Practitioner may maintain their license by completing, within the timeframe specified by CPA, all licensing renewal requirements. Licensing is valid for three years.

THIS DOCUMENT ONLY DESCRIBES THE AUTHORIZED GREENSCREEN PRACTITIONER PROGRAM AND DOES NOT GUARANTEE THAT PARTICIPANTS WILL BECOME LICENSED. IT DOES NOT GRANT PARTICIPANTS ANY LEGAL RIGHTS OTHER THAN TO PARTICIPATE IN THE PROGRAM, PURSUANT TO THE PAYMENT OF RELEVANT FEES AND MEETING OF PREREQUISITIES.

3.1 Change in Employment Status

Authorized GreenScreen Practitioners retain their licensed status should they leave their current employer. A new registered organization must be approved in writing by CPA.

4. Copyright

GreenScreen training materials are protected under copyright law and may only be copied, distributed or shared with written permission from CPA.