The EPCEMS Suite Environmental Police Conservation Enforcement and Management System

A Location Based Law Enforcement and Data Reporting Tool

Executive Overview

The EPCEMS Suite consists of: Epcems, EpcemsCentral, RadioLog, and <u>www.epcems.com</u>

Epcems: A Location Based Law Enforcement and Data Reporting Tool

Using GPS technology: Epcems allows a user to pinpoint his/her position and display that on a map. The regulations associated with all hunting and fishing activities for that location are then displayed in notebook format.

<u>Automated Vehicle Location</u>: Epcems sends the current GPS position to a server using the wireless internet connection on the laptop. The position of each active unit equipped with Epcems and a wireless internet connection will be displayed on EpcemsCentral.

<u>**Time/Location Based Regulations</u>**: Using the GPS position, Epcems determines in what Fish and Wildlife Entity the user is located, what regulations apply for those Entities and displays them based on the current date.</u>

<u>Man-hours Reporting</u>: Epcems allows the user to login and track their work hours as they move about during the day. Other types of records can also be stored locally, on the users laptop, and remotely on the server. Daily Reports are generated directly from these records and the hours associated with the daily activities are stored and used to generate standard Monthly Reports. This single point of entry saves time and effort so information does not need to be manually copied from one report to generate another. Any report based on man-hours in the field or other activities recorded through Epcems can easily be created.

National Marine Fisheries Service Joint Enforcement

<u>Agreement(JEA)</u>: Epcems includes a section to handle National Marine Fisheries Service Joint Enforcement Agreement. Hours and inspections are easily tallied to simplify reporting requirements. These activities and the hours associated with them are stored in a remote database for ease of access. Normal Patrol Logs and JEA Monthly Reports are automatically generated by Epcems. The only thing needed by the dispatcher is to review the report and send it to the desired person. **FDA Shellfish Growing Area Inspections:** As part of the JEA Patrol Section, inspections of Shellfish Growing areas can be tallied and reported. As a officer makes his/her normal patrol the number of visits to designated Shellfish Growing areas can be recorded. Reports are generated in a spreadsheet format for any given time frame. Other report options are available.

EpcemsCentral: A mapping system to display the position of active users

Automatic display updates: While the program runs, the dispatcher will be able to view all active units in the field displayed on a map of the area updated every 30 seconds. Each unit can be singled out and viewed alone and a 'Follow Me' feature will allow the dispatcher to keep track of a single unit on the map. Each unit displayed also includes the last time a position was received from that unit.

<u>Filtered Output:</u> The display can be filtered to view all units or just one region's units.

Hunting Zones Display: The current hunting zones can be overlaid over the map to display boundaries. These include: Duck Zones, Goose Zones, Deer Zones, Muzzleloader Squirrel Zones, Woodcock Zones, Grouse Zones, Quail Zones, Trapping Zones and other zones.

RadioLog: A program to display active radio units

Display Color-Coded View of Agents In The Field: The program will display each unit by radio call sign color-coded to whether they are signed on, signed off, or out of the vehicle.

<u>Automatic Timer for Contacts:</u> When the dispatcher records an interaction with a field agent, a two hour timer will be started. If an agent is not in contact for that time a message appears for the dispatcher to act. A 30 minute timer will be set when an agent reports being out of the vehicle so that the dispatcher may contact the out of vehicle agent after that time period. The 30 minute value can be modified by the dispatcher.

<u>Active Agents Report</u>: A report can be generated at the end of the day indicating which units are still in the field, what time they anticipate going off duty and the area covered by each.

Detailed Agent Reports: A detailed report of any displayed agent is available by 'clicking' on the radio number. This will show all the records for the day for that agent in chronological order. A printed report of this is also available.

<u>Monthly Standard Reports</u>: Monthly reports can be automatically generated for each region. The reports will be available for viewing or storage either online or by printing and filing.

The Epcems Web Site: www.epcems.com

<u>Updates available on website:</u> Updates to the software and the associated data will be available to authorized users of the web site.

<u>View Man-hour Totals</u>: Man-hours may be viewed by authorized users as totals by hour types and regions or districts. In addition, other 'canned' reports will be available to users with the proper level of authorization.

<u>Generate Daily and Monthly Reports:</u> Authorized users will be able to login to the web site and generate their Daily and/or Monthly reports. The reports will be generated in PDF format for ease of reading and printing. Monthly and Daily Reports may be printed from here and summary reports will be available to supervisors.

Standard Joint Enforcement Agreement Reports: The reports normally hand generated by the Marine Dispatcher will be automatically generated from the data in the database. These reports will include the Patrol Log reports for each CO or team of CO's on patrol, the FDA Shellfish Areas Patrol Log, and the NMFS Monthly report. Other reports can be created based on the data available.

Epcems Future:

Epcems is an ongoing project: As part of the annual maintenance, updates to the program and data occur when needed.