CLAIMS

There is claimed:

1. A method comprising:

constructing geolocation data for process components within an industrial plant, based on graphical data from a distributed control system of the industrial plant, device data from an asset management system of the industrial plant, and map data;

accessing historical operational information for the process components from a plant operation system of the industrial plant;

for each process component, associating the geolocation data of the process component with one or more tasks that correspond to the process component, based on the historical operational information of the process component;

tracking, in real time, a route of an operator using a location tracking system;

changing the route of the operator based on a location of the operator, the geolocation data of the process components, and the one or more tasks of one or more of the process components; and

automatically sending a communication for displaying and notifying the operator of the changed route,

wherein changing the route comprises:

retrieving from a database, information relating to machine risk for each process component and information related to environment risk for each of a plurality of areas within the

industrial plant;

determining for each of a plurality of areas within the industrial plant, a real-time risk for the area based on the information on the machine risk of process components within the area and the information on the environment risk of the area;

in response to the real-time risk for an area being greater than a predetermined threshold, designating the area as a hotspot risk area; and

changing the route of the operator to avoid hotspot risk areas within the industrial plant.

2. The method according to claim 1, further comprising:

displaying a graphical display including a map of the industrial plant, and an overview area,

wherein, in response to a selection of a particular area of the map, tasks associated with one or more process components located in the particular area are displayed in the overview area of the graphical display.

3. The method according to claim 2, further comprising:

analyzing the geolocation data associated with the one or more tasks of the process components; and

displaying a graphical display including a map of the industrial plant, and an overview area,

wherein, in response to a selection of a particular area of the map, graphs representing data associated with one or more tasks associated with the one or more process components located in the particular area are displayed in the overview area of the graphical display.

4. The method according to claim 1, wherein the communication comprises the one or more tasks and standard operating procedure steps for completion of the one or more tasks.

5. The method according to claim 1, further comprising:

displaying a graphical display including a map of the industrial plant, and an indication on the map demarcating the hotspot risk areas that are designated.

6. A system comprising:

a plurality of process components in an industrial plant;

a storage storing program code, and a processor which accesses the program code and executes the program code to:

construct geolocation data for the plurality of process components, based on graphical data from a distributed control system of the industrial plant, device data from an asset management system of the industrial plant, and map data;

access historical operational information for the plurality of process components from a plant operation system of the industrial plant;

for each process component, associate the geolocation data of the process component with one or more tasks that correspond to the process component, based on the historical operational information of the process component;

track, in real time, a route of an operator using a location tracking system;

change the route of the operator based on a location of the operator, the geolocation data of the plurality of process components, and the one or more tasks of one or more of the process components; and

automatically send a communication for displaying and notifying the operator of the changed route,

wherein to change the route the processor accesses the program code and executes the program code to:

retrieve, from a database, information relating to machine risk for each process component and information related to environment risk for each of a plurality of areas within the industrial plant;

determine, for each of a plurality of areas within the industrial plant, a real-time risk for the area based on the information on the machine risk of process components within the area and

the information on the environment risk of the area;

in response to the real-time risk of an area being greater than a predetermined threshold, designate the area as a hotspot risk area; and

change the route of the operator to avoid hotspot risk areas within the industrial plant.

7. The system according to claim 6, wherein the processor accesses the program code and executes the program code to:

display a graphical display including a map of the industrial plant, and an overview area,

wherein, in response to a selection of a particular area of the map, tasks associated with one or more process components located in the particular area are displayed in the overview area of the graphical display.

8. The system according to claim 7, wherein the processor accesses the program code and executes the program code to:

analyze the geolocation data associated with the one or more tasks of the process components; and

display a graphical display including a map of the industrial plant, and an overview area

wherein, in response to a selection of a particular area of the map, graphs representing data associated with the one or more tasks associated with the one or more process components located in the particular area are displayed in the overview area of the graphical display.

9. The system according to claim 6, wherein the communication comprises the one or more tasks and standard operating procedure steps for completion of the one or more tasks.

10. The system according to claim 6, wherein the processor accesses the program code and executes the program code to:

display a graphical display including a map of the industrial plant, and an indication on the map demarcating the hotspot risk areas that are designated.