ADEQ Arizona Department of Environmental Quality

Memorandum

Date: January 31, 2014

From: Lowell Carty, Waste Programs Division

Re: Instructions for Creating Geographic Information System (GIS) Boundaries

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division (WPD) has developed the following instructions for preparing and submitting an electronic file of Geographic Information System (GIS) boundaries for No Further Action (NFA) properties and for properties implementing a Declaration of Environmental Use Restriction (DEUR). The instructions are provided for preparation in both Google Earth and/or ArcGIS Explorer. If you have any questions, please contact Lowell Carty at Carty.Lowell@azdeq.gov or (602) 771-4413.

PREPARATION UTILIZING GOOGLE EARTH:

1. Launch Google Earth program.

2. Enter your site information in the search box (i.e.: physical address and zip code).

3. Using the navigation tools, zoom to the site.

4. Once the site is centered on screen, select "View" from the command ribbon at the top of the screen. Scroll down the "View" menu and select "Reset", then "Tilt and Reset Compass".

5. Select the "Add Polygon" icon.

6. Using the polygon points, draw the outline of the NFA or DEUR boundary on the screen, leaving the polygon text box open.

7. Once the polygon is drawn, name the polygon (using the full site address) in the pop-up text box. Under the "Description" tab enter the ADEQ site code. Do not close text box yet.

8. Select the tab labeled "Style,Color". Set the opacity of the "area" of polygon at 50% and set the "Filled+Outline" color as red. Click "OK" to close the pop-up window.

9. The named polygon now appears under the contents header "Places" on the left of screen.

10. Right-click on the named polygon in "My Places" and select "Add" then "Folder" to create a folder to store this polygon and any others you may create (name the folder appropriately for what you will be storing in it). Click and drag the polygon into your new folder

11. Right click the polygon on the map and select "Save Place As". Save the polygon you have created as a KMZ file and use the following nomenclature for naming the file: **[ADEQ Six Digit Site Code]-[Name of Boundary].KMZ** (the name of boundary used should reflect the specific area of a site for which an NFA or DEUR is sought. Check with your ADEQ project manager for more information). You will need to determine where on your drive you want to save the file. ADEQ recommends creating a folder so additional polygons can be saved to it and kept in the same place on your drive.

12. E-mail your KMZ file(s) to your project manager at ADEQ along with your NFA request and/or DEUR submittal.

PREPARATION UTILIZING ARCGIS EXPLORER:

1. Launch ArcGIS Explorer program.

2. On the top toolbar, select "Basemap" and nine options will appear. Select the option "Imagery with Labels".

3. Use "Find" feature (binoculars icon) and enter the city and state or site address with zip code. If you search by address, multiple options/variations on the address may appear, double click the correct one.

4. Select the "2D/3D" button on far right of Home Tab and select "3D" from drop-down list. Wait for the screen settings to change. Wait for the view settings to change. Once 3D settings have taken effect, you may need to zoom back in to the site again.

5. Zoom to the site using either the mouse wheel or the navigation tool located in lower left corner of map.

6. Use "Area" selection above Create Tab to draw the outline of the NFA or DEUR boundary. Single click to open the tool. Double click to close/complete the area.

7. After you have double clicked to close the area a "note" feature will pop up. Name the note (using the full site address). Enter the ADEQ site code.. Click "ok" to close the note feature. The boundary is now listed under the "Contents" header on the left.

8. Add a folder by clicking on the "folder" icon to create a folder to store the area/site and any others you may create (name the folder appropriately for what you will be storing in it). Click and drag the polygon into your new folder. Additional boundaries (i.e.: multiple NFAs) can be added to this folder for ease of storage and submittal to ADEQ.

9. Move cursor over the shaded area, right click on the area and select "Share". Three options will appear (Map Content, Layer Package, and KML). Select "KML". Select "File". This allows you to save a KMZ file. Use the following nomenclature for naming the file: **[ADEQ Six Digit Site Code]-[Name of Boundary].KMZ** (the name of boundary used should reflect the specific area of a site for which an NFA or DEUR is sought. Check with your ADEQ project manager for more information.) You will need to determine where on your drive you want to save the file. ADEQ recommends creating a folder so additional polygons can be saved to it and kept in the same place on your drive.

10. E-mail your KMZ file(s) to your project manager at ADEQ along with your NFA request and/or DEUR submittal.